

• FEBRUARY 1956

BUTANE-PROPANE

News

FIFTY CENTS PER COPY

Don't Overpay
Your Taxes

•
Rural Italy
is Cooking
with L.P. gas

HEADQUARTERS FOR L.P. GAS INFORMATION SINCE 1931

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SERVICE

The key to superior business relations in any field is service. With Tuloma, it means taking a friendly, personal interest in each customer. Trained, technical personnel, with years of experience, make it a point of knowing your operations and your requirements.

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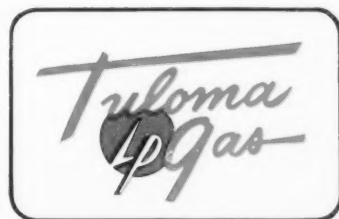
Our representatives will welcome the opportunity of discussing with you the many extra advantages of contracting with Tuloma.



Write, wire or call . . .

TULOMA GAS PRODUCTS COMPANY

PHONE Cherry 2-3261 • BOX 591 • STANOLIND BUILDING • TULSA 2, OKLAHOMA





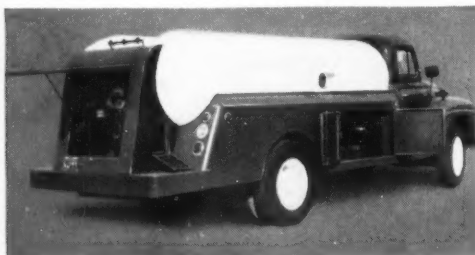
Hackney Lightweight LP-Gas Cylinders are made in a complete range of types and sizes from one to 420 pounds. Horizontal Cylinders available in the larger

sizes. Two-piece construction, with minimum seam area. Famous for light weight, easy handling, good looks and long life.

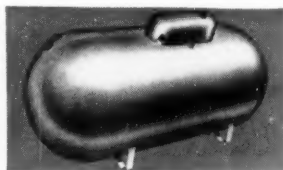
Quality LP-Gas Containers from one pound to 30,000 gallons



Hackney Lift Truck Cylinders for increasing your LP-Gas sales to the growing industrial lift truck market. Three popular sizes in vertical and horizontal models. Permanently mounted ASME Fuel Tanks supplied for lift trucks, tractors, trucks, buses, taxis.



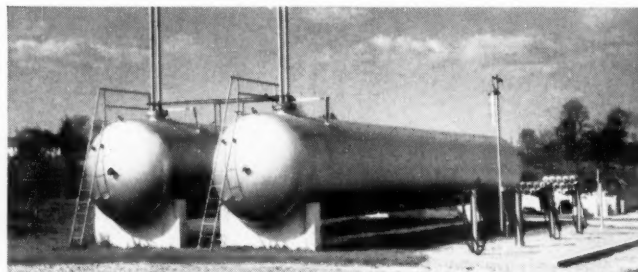
Downtown LP-Gas Tank Trucks are designed with special features to speed up deliveries. Meet both ICC MC-330 Specifications and ASME Code for 250 pounds pressure. Several sizes available, including the popular 1700-gallon capacity. Can also be made for anhydrous ammonia service.



Hackney LP-Gas Systems, with shoulder- or end-connected fittings for convenient filling. Seven standard sizes from 250 to 3360 gallons.



Hackney Anhydrous Ammonia Tanks in capacities of 500 and 1000 gallons. Also Hackney Ammonia Applicator Tanks up to 150 gallons.



Downtown Bulk Storage Tanks for LP-Gas or anhydrous ammonia. Standard or special sizes up to 30,000 gallons. Supplied with or without fittings.

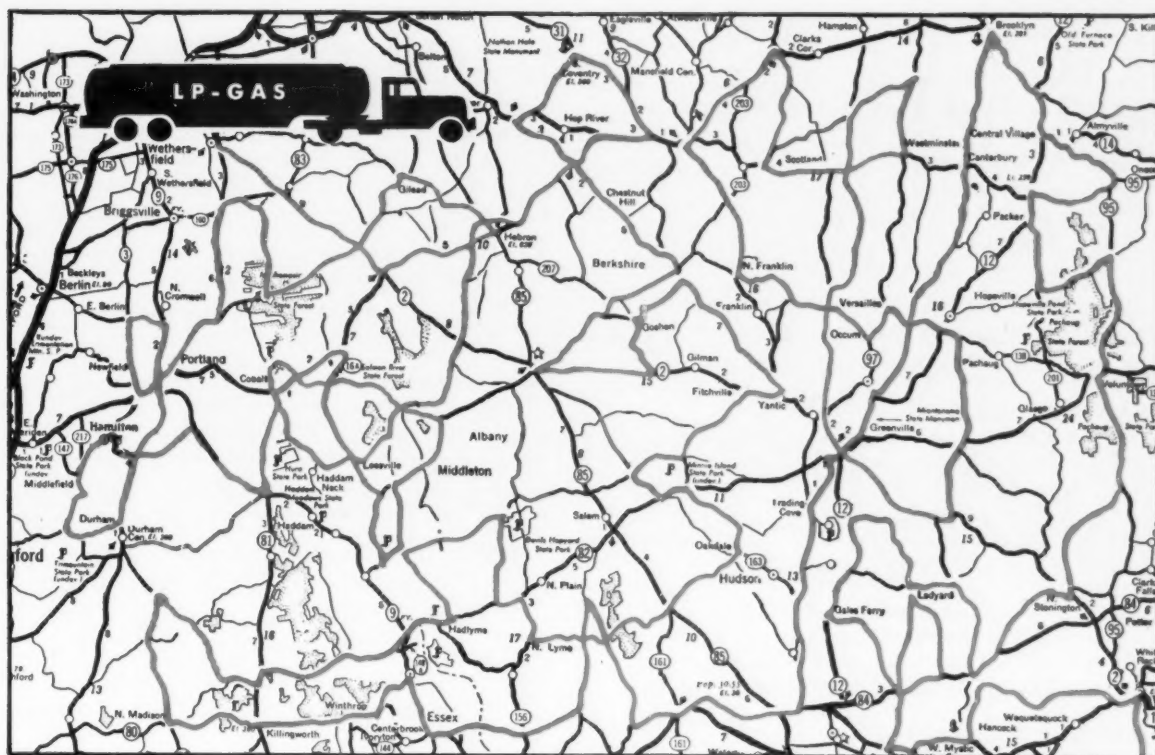
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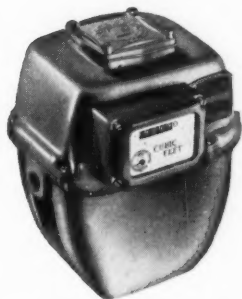
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Table of Contents

Butane-Propane News

FEBRUARY 1956

Volume 18, Number 2

WHIRLWIND IN A FEATHER FACTORYCarl Abell	25	MAPLE SYRUP PRODUCER CUTS COSTS	
The propane torch is a practical solution to the problem of sanitation in the poultry business.		BY COOKING WITH LPG	62
		The unequal struggle against the scarcity and high cost of farm labor brought about the conversion to propane.	
CREDIT AND COLLECTIONS:		THE MECHANICS OF THE MODERN	
HOW, WHEN, WHAT???	A. B. Buckeridge 29	CLOTHES DRYER	John W. Christensen 67
How sound credit terms may be used as a strong sales force.		How the clothes dryer makes a batch operation out of the old hang-them-on-the-line method.	
HIGHLIGHTS FROM THE PARKHILL ALBUM	32	SAFETY ROUNDUP — ELIMINATING LIQUID	
A historical picture story of the company.		FUEL HAZARDS AT COTTON GINS	124
RURAL ITALY IS COOKING		Attention is called to unsafe conditions that have been reported on LPG engines operating cotton gins.	
WITH GAS	Giovanni Coppa-Zuccari 37		
Italians are expected to consume 160 million gal. of L. P. gas in 1956.			
DON'T OVERPAY YOUR TAXES	41	POWER SECTION	
Points to consider carefully in filing your tax returns.		LPG PUTS THE BEE ON THE BUGS	Jim Kennedy 127
LPG HEATS HOSPITAL FOR		A switch from gasoline to L. P. gas makes the pest control field more lucrative.	
AILING THOROUGHBREDS	H. J. Miller 43	PROPANE PROTECTS YOUR	
Thoroughbreds get almost as good treatment for their ailments as do humans in this LPG-heated hospital.		BREAKFAST STRAWBERRIES	131
		Propane-operated precooling units keep 'em fresh.	
CLAIBORNE BEATS COMPETITION		IN FLORIDA, "POUNDS" MEANS "L. P. GAS"	134
WITH COMPETITION	Emmett Maum 48	Year-and-a-half record: Out of 150 tractors sold, 140 were fitted for L. P. gas.	
This is a picture of aggressive selling and exceptional after-sale service.			
THE PRESSURE GAUGE — CLUE		DEPARTMENTS	
TO GOOD PUMPING	Keith Wood 54	Advertisers Index	138
Are you using a pressure gauge to good advantage?		Associations	103
WHAT A WHOPPER OF A FISH STORY —		Beyond the Mains	21
EPISODE NO. 7	J. Arthur Thompson 58	Calendar	97
This time Propane Pete attracts a whole family to the L. P. gas business.		Classified	122
		What's new in Products	
		and Trade Literature..	87
		The Trade	105

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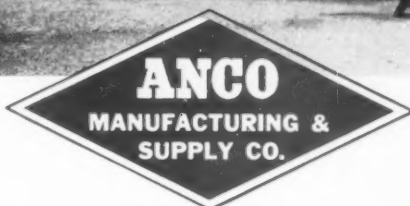
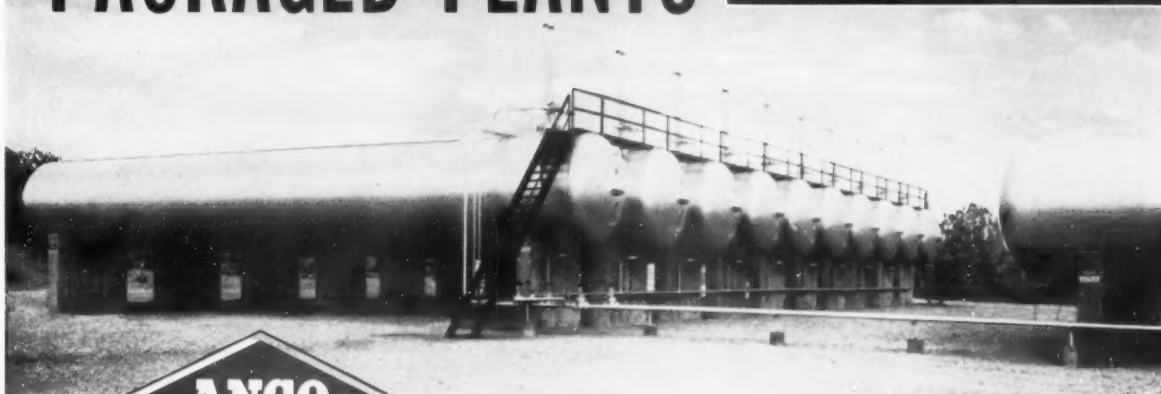
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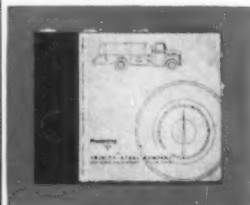
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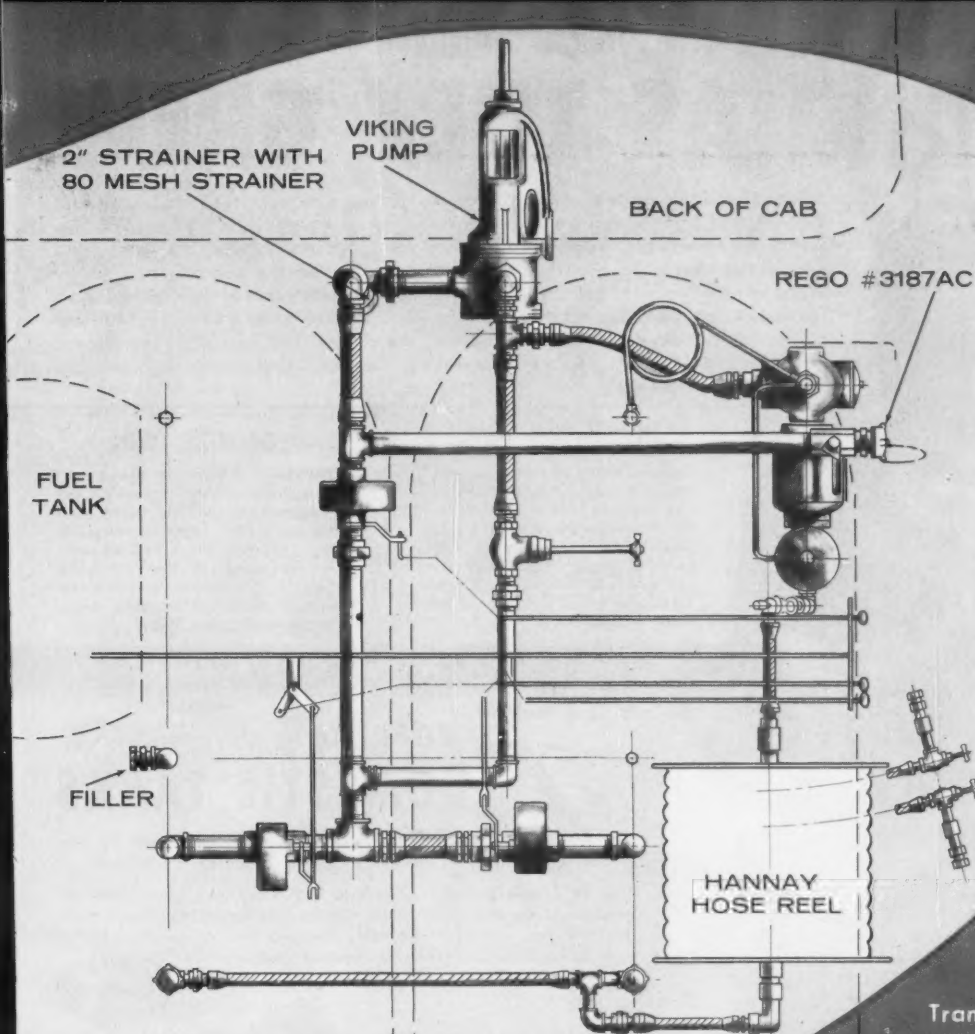
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25th Anniversary

DALLAS, TEXAS

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DE LUXE TWIN

Here is the choice of the fleet owner! It is the finest looking unit on the road with plenty of big, roomy cabinet space. It is a complete unit (1200 thru 2400 WG) with Viking mechanical seal pump, 50' filler hose, ICC lights, P.T.O., splines jack shaft and it is all piped and ready to use. A complete "Package Unit."

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Buy one or a truckload.

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Each tank is fabricated to rigid specifications by men with years of domestic tank installation experience.

They're double tested . . . "Built to Last a Lifetime." They meet all national, state and local requirements. It is the safest, finest quality tank you can buy! Smoothly finished and aluminum painted over red oxide. Complete satisfaction guaranteed.

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Your Load
the
Nor-Tex Way**

**Finance the
Balance**



**Immediate
Delivery**

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Whatever your needs in LPG equipment there is a factory tailored Nor-Tex unit ready for you! We manufacture LPG Truck and Transport Tanks, and we are truck distributors. We manufacture all types of LPG Tractor and Motor Fuel Tanks, Portable LPG Filling Stations and Trailer Tanks, LPG Storage and Domestic Tanks, Farm Carts and Anhydrous Ammonia Tanks, all built by men with years of Butane-Propane bulk plant experience. Phone, wire or write us. Interested attention, experienced assistance and helpful suggestions are always yours for the asking.

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P. O. BOX 1219

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"Biggest LP-G Year Ever Ahead," is the report from everywhere. Slash delivery costs with Nor-Tex High Flow Piping Units! Perfectly Balanced! Famous for loading and delivering LP-Gas faster!

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Get immediate delivery on this internationally popular Nor-Tex twin and save money, too! It has everything you need in sizes from 1200 thru 2400 WG. Viking mechanical seal pump, 50' filler hose, ICC lights, P.T.O., splines jack shaft and it is completely piped and ready to use. A complete "Package Unit." (Model illustrated.)

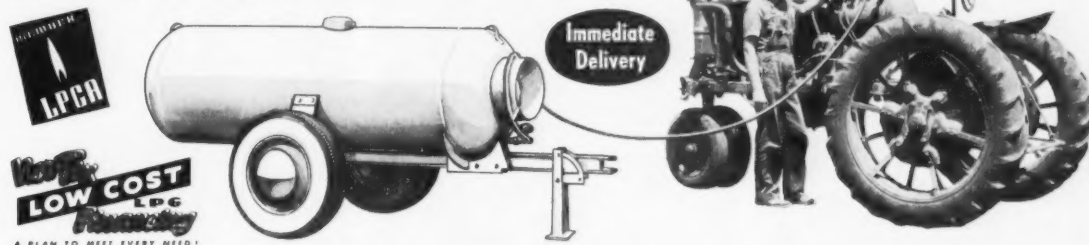


Nor-Tex PIPE-IT-YOURSELF "Package Units" — Nothing More To Buy!

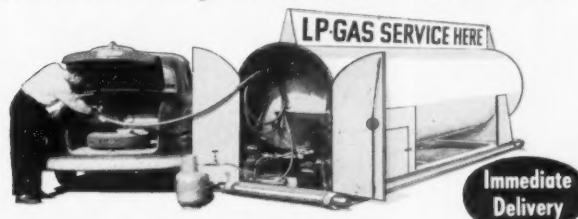
Nor-Tex FARM CART— Spots Your Fuel Where You Need It

Farmers save many hours by placing their fuel supply right where they need it with the well-baffled Nor-Tex Farm Cart. It is completely easy and easy to "spot" with car, truck or tractor. Complete with recessed relief valve, 12½' delivery hose, ¾" OIC valve and hose coupling. Mounted on a heavy duty axle with standard Chevrolet hub and 15" wheels. Sturdy I-beam tongue.

NOTE: All Nor-Tex Star Domestic Tanks of 500 WG or more include a convenient liquid line outlet for wet line connection to tractor fuel tank.



Make It Easy and Convenient for Customers to BUY and USE LP-Gas



Nor-Tex "PONIES" (strategically placed for best distribution) can substantially boost year 'round sales and quotas. Operate them yourself or arrange with highway service stations to dispense LP-Gas for you. Nor-Tex portable "PONIES" can be easily placed on farms, ranches, in truck and bus terminals and "on-the-job" for contractors and utility companies. Nor-Tex "PONIES" meet all requirements — U-69 — W250 Codes. Sizes: 500, 700, 1000, 2000, 3000 and 4000 WG. Available with your choice of pumps, meters and accessories.

TEXAS TANK CO.

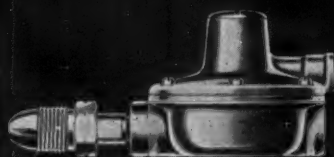
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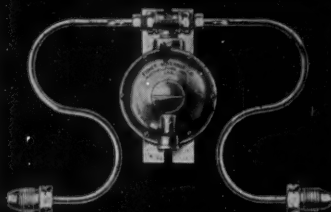
Regulators

The L P G



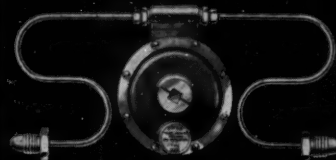
TYPE 912-5

For cash and carry and trailer installations. 57 cu. ft. per hour or more capacity.



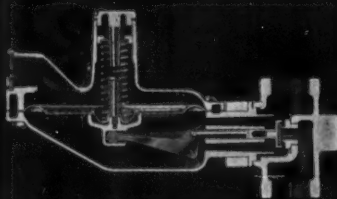
TYPE 912-2

Two cylinder check valve manifold assembly. 50' cu. ft. per hour or more capacity.



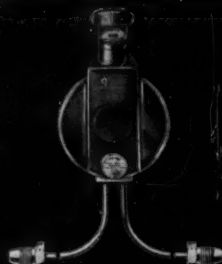
TYPE 923

Two cylinder integral check valve manifold assembly. 100' cu. ft. per hour or more capacity.



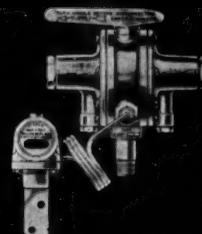
TYPE S102-4

High capacity second stage regulator in $\frac{3}{4}$ ", 1" and $1\frac{1}{4}$ " sizes. Pounds to inches reduction.



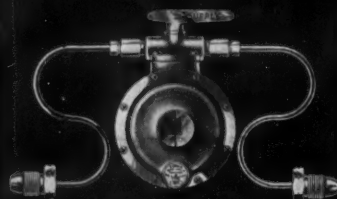
TYPE 965A

Multiple cylinder automatic change-over assembly. 85 cu. ft. per hour or more capacity.



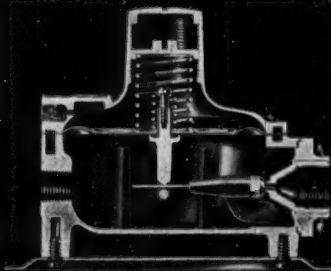
TYPE R100-7

Automatic changeover manifold with direct or remote mounted indicator. Capacity 120 cu. ft. per hour Propane.



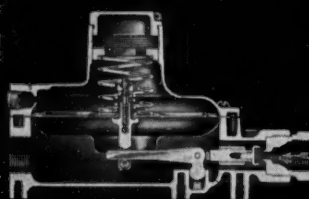
TYPE 924

Two cylinder manual change-over assembly. 100 cu. ft. per hour or more capacity.



TYPE 922

For Butane-Propane service. 190 cu. ft. capacity.



TYPE 932

The "Husky" Standard 500 gallon tank regulator.

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A REGULATOR FOR EVERY PRESSURE CONTROL SERVICE

As the world's largest manufacturer of LPG regulators—Fisher offers a variety of types—each one engineered and built to your exact needs. Illustrated here are a few of the varieties of construction. Fisher Bulletin LP-6 gives specifications of Fisher's complete line of domestic regulators and high capacity, heavy duty regulators of all sizes for all commercial and industrial installations. Write for your copy today.

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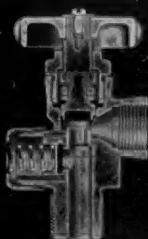


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BETTER GAS PRESSURE CONTROL



TYPE H185
External safety relief valve.
Flow capacity: 2210 cfm. air.
Set pressure: 250 psi. For 200 containers.



TYPE B100
Cylinder valve with integral safety relief valve.



TYPE C100
Service line shutoff valve.



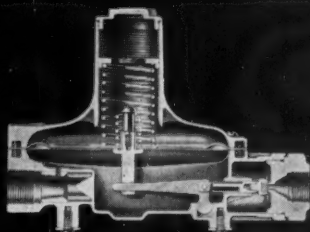
TYPE D100
Filler valve with 1 1/4" - 5 Acme hose connection and 3/4" - 14 NPT container connection.



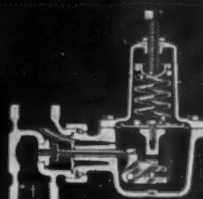
TYPE D126
Filler valve with 1 3/4" - 6 Acme hose connection and 1 1/4" NPT container connection.



TYPE H235
Internal safety relief valve.
Flow capacity: 2490 cfm air.
Set pressure: 250 psi. For Type 200 containers.



TYPE 722 V
The "Work Horse" regulator for 1000 gallon and larger tanks.



TYPE 620
A high capacity pounds to pounds gas regulator for either first stage installations or high pressure industrial applications.



TYPE E100
Vapor return valve with 1/4" - 5 Acme hose connection and 3/4" - 14 NPT container connection.



TYPE E125
Vapor return valve with 1 1/4" - 6 Acme hose connection and 1 1/4" - 11 1/2 NPT container connection.

It's here! The only

It guarantees floor-to-



the new

Universal



**CONSTANT
COMFORT
GAS HEATER**

for LP or city gas

Products of Cribben & Sexton Company, Chicago 12, Illinois



Universal
Gas Ranges



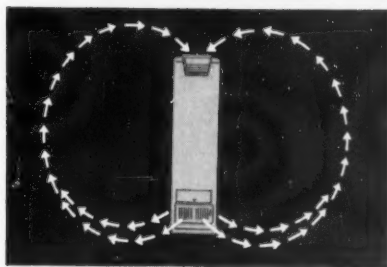
Universal Automatic
Gas Clothes Dryers



Universal Consum-all
Gas Incinerators

home heater so new, so revolutionary...

constant ***-ceiling comfort!***



New "central heating" principle ends cold floors and hot ceilings ... constantly circulates warm, filtered air all over the rooms!

No wonder the Universal Constant Comfort Gas Heater is being hailed as the first *really* new home heater in 20 years!

It looks new! Smartly and compactly designed to complement the finest furnishings and save floor space.

It feels new! No more on-again, off-again heat blasts that leave floors uncomfortably chilly and ceilings burning hot.

It is new! A revolutionary new principle of constant heat circulation brings the floor-to-ceiling comfort of the most modern central heating systems to "space heater" homes.

Yet Universal Constant Comfort costs less than some ordinary heaters and requires no extra installation.

How does it work?

Universal Constant Comfort is completely automatic. Simply start it at the beginning of the heating season and forget it. The temperature selected on the thermostat control is maintained throughout the rooms at all times by *constant* circulation of warm, filtered air. Even hard-to-heat floors stay safely and comfortably heated so there's never a worry about children playing upon them. Because Universal's completely new principle brings down and re-circulates preheated ceiling air, fuel costs are lower too.

Opens a big new profit opportunity!

If there's a market for "space heaters" in your area, there's a many times bigger one for the new Universal Constant Comfort Gas Heater. Customers who have never bothered to replace their old equipment

because there was nothing really new available will literally want to kick their old "space heaters" right out the door. In addition, there's a fast growing, new demand for heaters in motels, house trailers, shopping centers and many other locations. Universal Constant Comfort fits all these needs as no other can.

Get all the details now!

A big national advertising program is scheduled to break early in the Fall selling season. You'll want to be ready. So rush the coupon today for complete details of the Universal franchise plan that will make your store headquarters for the *hottest* home appliance since TV!

**Never before a
GUARANTEE
like this!**

Cribben and Sexton Company guarantees the Universal Constant Comfort Gas Heater (when used in proper size for space to be heated) will out-perform any heater now sold in maintaining constantly comfortable temperatures from floor to ceiling.

Here are new features that make all other home heaters out of date!



New beauty! Designed to complement the home and furnishings.



New safety! Fiberglass insulated cabinet always stays cool, safe to touch.



New convenience! Simple, eye-level controls are out of children's reach.



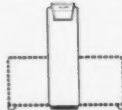
New freshness! Heats and delivers only freshly filtered air.



New economy! Cuts fuel bills by using only preheated ceiling air.



New comfort! Not just one, but three adjustable vents put heat where wanted.



New space-saving! Fits in far less space than conventional "space heaters."



New utility! Operates as an air circulator in summertime.

Rush coupon for details of this exciting new profit opportunity!

Cribben & Sexton Company
700 North Sacramento Blvd. • Chicago 12, Ill.

Gentlemen:

Please rush complete information about the special money-saving advantages of placing my Universal Constant Comfort Gas Heater order now.

your name _____

firm name _____

street address _____

city _____ zone _____ state _____



NEW DEVELOPMENTS

LIKE THESE MAKE

Quaker HEATERS
Big Business!

Quaker

THESE NEW LINES WILL JUMP

NEW! SAFETY "COOL CABINET"
UNVENTED GAS HEATERS

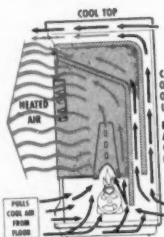


COOLEST OF THE COOL CABINETS

"Air Stream Construction!" The most advanced construction in unvented gas heaters and *only Quaker has it!* This new design keeps cabinet "safety cool"—eliminates danger of scorched furniture or draperies—insures longer heater life, greater dependability, greater safety—produces more radiant heat—delivers more circulation warmth! Luxuriously finished in beautiful "Sahara" lifetime porcelain and Silicone "Gold."

4 NEW MODELS:

12,000—20,000—30,000—40,000 BTU input capacities.



Quaker Exclusive
Air-Stream Construction

NEW! 20-YEAR VENTED
AUTOMATIC GAS HEATERS



GUARANTEED 20 YEARS

Only Quaker Gas Heaters carry a 2-Way 20-Year Guarantee ... both the advanced Quaker "Multi-Heat" burner and double porcelain combustion chamber are guaranteed 20 years ... and only Quaker gives you a fully automatic gas heater ... Automatic Forced-Air Warm Floor Blower, Automatic Minneapolis-Honeywell Temperature Control and Automatic 100% Safety Shut-Off ... all factory installed.

Finished in beautiful Hammertone Beige and Silicone "Gold."

**4 NEW RADIANT VENTED
MODELS: 35,000—50,000
—65,000—80,000 BTU in-
put capacities.**

**4 NEW "BLUE FLAME"
VENTED MODELS: 35,000
—50,000—65,000—8,000
BTU input capacities.**

Quaker

MANUFACTURING CO.

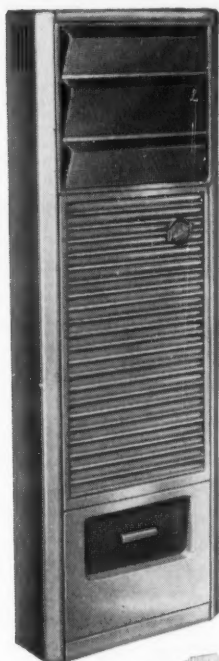
Heating Division of Florence Stove Company • 1147 Merchandise Mart • Chicago 54, Ill.

DEALER SALES UP 180% IN 1955!

YOUR PROFITS EVEN HIGHER IN '56!

NEW! Decorator "COOL CABINET" GAS WALL HEATERS

*They Hang on the
Wall like Pictures!*



Require no floor space! As easy to install as free standing gas heaters. The greatest developments in gas heaters in the last 25 years and *only Quaker has them*. They make all other heaters old-fashioned. Cabinets are extra-cool . . . extra safe . . . can be re-painted to blend with any room color motif.

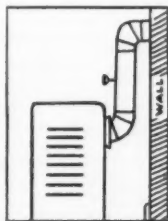
VENTED

Model WCV 256. Capacity 25,000 BTU input. Height 60", width 26", depth 7". Cabinet finished in durable baked-on Hammertone Beige. Decorative grille finished in luxurious baked-on "Gold" silicone. Equipped with Minneapolis-Honeywell S-1 Addatrol 100% Safety Shut-Off.

Also available in 40,000 BTU.

UNVENTED

Capacity: 25,000 BTU input. Height 48". Width 20". Depth 6". Cabinet finished in durable baked-on Hammertone Beige. Decorative Grille and Louvers finished in luxurious baked-on "Gold" silicone.



ORDINARY
HEATERS



NEW
QUAKER



\$50

The "Hottest" Line in the Industry, Backed
by the "Hottest" Promotion for 1956

**TRADE-IN PROMOTIONS THAT
DON'T COST YOU A CENT**

Help you sell more heaters than you ever dreamed possible. WRITE FOR DETAILS!

QUAKER MANUFACTURING COMPANY
1147 Merchandise Mart - Chicago 54, Illinois

Gentlemen:

Please direct my nearest distributor to furnish me with full
information about Quaker's new 1956 lines and promotions.

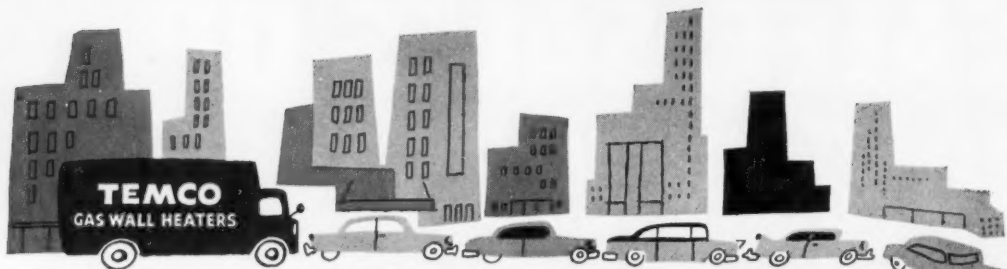
Name _____

Name of Firm _____

Address _____

City _____

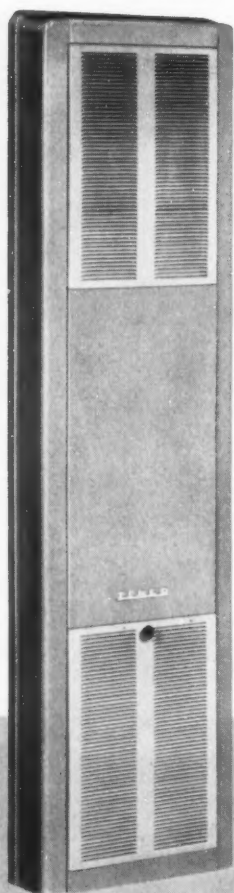
State _____



AMERICA IS SUBURBIA-BOUND...



AND SO IS TEMCO!



Your prospect list is growing by leaps and bounds as more and more Americans become home owners. They're migrating by the millions to the suburbs.

And even if they move out beyond the natural gas lines, they're prime prospects when you turn to Temco. For Temco's Automatic Gas Wall Heaters are precision-engineered to operate with equal efficiency on natural, manufactured, or LP gas. That means the best in low cost automatic gas heat wherever they live — suburbs, town, or country.

Temco's Automatic Gas Wall Heaters are perfect for homes with slab foundations, for upstairs rooms, for homes where floor space is at a premium. They fit right into the wall, between standard studding.

What's more, Temco's Wall Heaters are competitively priced and backed by a strong program of national advertising.

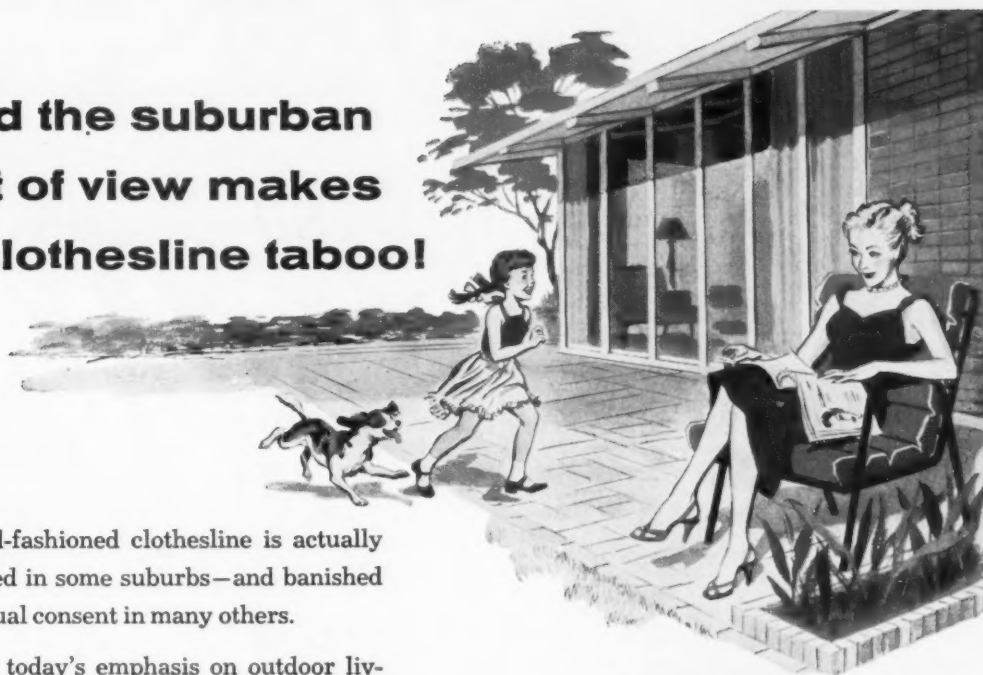
For full details on the many exclusive features that have moved Temco into the forefront of the gas heating field, clip and send coupon on opposite page.

TEMCO, inc.

NASHVILLE, TENNESSEE

"Gas Heating Specialists for the Nation"

...and the suburban point of view makes the clothesline taboo!



The old-fashioned clothesline is actually outlawed in some suburbs—and banished by mutual consent in many others.

With today's emphasis on outdoor living, no one wants to spoil the view with an unsightly clothesline.

Thus the suburb boom becomes a sales boom for dealers who stock quality clothes dryers—
...like TEMCO

Temco's Automatic Gas Clothes Dryer banishes not only the unsightly clothesline, but also hours of drudgery and scores of weather worries for its happy owners. It's the ultimate in worry-free home-laundry convenience:



- * *Wonderful Mistaway*
- * *Knee-High Push-Button Door*
- * *Exclusive Sun Dial—One Control to Set*
- * *Competitively Priced*

TEMCO, Inc.
Department 8-822, Nashville, Tennessee

Please send me catalog and complete story on—

- ☐ Temco Gas Wall Heaters
☐ Temco Gas Clothes Dryers

Name

Firm Name

Address

City Zone State



DO THE "GROUND-BREAKING"

NOW

TO BUILD THAT
SUMMER LOAD!

Our strong national consumer advertising program is designed to help every WARRENGAS dealer increase and hold summer business. So, why not do your "ground-breaking" NOW. Write, wire or phone our nearest office. We will be glad to give you all the details on how to build that summer load.

WARRENGAS
the Concentrated fuel

SALES OFFICES

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ST. LOUIS, MISSOURI

FT. WORTH, TEXAS

NEW YORK, N. Y.

MADISON, WISCONSIN

JACKSON, MISSISSIPPI

HOUSTON, TEXAS

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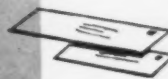
OMAHA, NEBRASKA

COLUMBIA, SOUTH CAROLINA

TAMPA, FLORIDA

WARREN PETROLEUM CORPORATION

TULSA, OKLAHOMA

**BPN**

Letters

Effect of Altitude on Btu content

Nevada

In a discussion I was told that in a recent issue of your magazine it was brought out that propane, when used at around 6000 ft, had a Btu value per cubic foot below that of 2550.

If this is true, it may be the answer to the trouble we have had, and have not been able to locate. A few meter operations which we have run more on the meter than the tank truck is able to deliver when the tank is filled. How about this?

W.W.D.

Elevation has a very pronounced effect on the volume of gas produced from a quantity of liquid.

For instance, a gallon of pure propane will produce 36.45 cu ft of 2525 Btu per cu ft of vapor when measured at sea level where the atmospheric pressure is about 14.7 lb per square inch absolute. However, at 6000-ft elevation the atmospheric pressure is only 11.84 lb per square inch absolute.

The expansion of gas and consequent reduction in heating values are in proportion to the absolute pressure variations. Therefore, the gallon of propane would produce $36.45 \times \frac{14.7}{11.84} = 45.3$ cu ft of about 2040 Btu per cu ft gas.—Ed.



New Application

Washington

A prospective customer has purchased a Bosch steam boiler from Holland and it is the first unit of this kind to arrive in the United States.

This outfit is constructed to cook cull potatoes for cow feed and it is designed to burn peat, coal, or wood for fuel. He wants to install a propane burner in it.

If we sold him fuel for 17 cents per gallon, could we compete anywhere near the operating cost of coal at \$20 per ton? This boiler will use 65 lb of coal to cook 1 ton of potatoes. We

know the handling cost of coal will be high, but he must still keep down the overall cost of fuel.

H.C.V.

The heating value of coal varies greatly as does its ash and moisture content. Therefore, unless we have additional information we can only estimate what its heating value may be. We can only assume your prospective customer is considering the use of Montana coals.

The heating value of the better Montana coals is about 12,500 Btu per pound on the dry basis. The as-received moisture content ranges from 10% to 17%. So if we assume an average of 13% moisture then the heating value per pound on the as-received basis will be about 10,900 Btu per pound; \$20 per ton is 1 cent per pound.

If he will use propane at 92,000 Btu per gallon it would take about 8½ lb or 8½ cents worth of coal to carry an equal heating value. However, it is going to take a lot more than 8½ lb of coal to deliver as much heat to the potato cooking as can be delivered by a gallon of propane. A good propane burner, properly installed should be, conservatively, 70% efficient. Therefore, from 1 gal. of propane $92,000 \times .70 = 64,400$ Btu will be delivered to the cooker.

Coal with its excess air requirements, irregular firing, excess air needs, unburned fuel lost in the ash, unburned gases distilled off when fresh coal is added, etc., will do very good to operate at 50% efficiency, which means that only 50% of the heat in 1 lb of coal, or 5450 Btu, will reach the cooking vat.

Therefore, it will require $64,400 \div 5450 = 11.8$ lb of coal to do the work of 1 gal. of propane. We believe we are giving coal a break in the above analysis as we doubt coal will be 50% efficient, and with a little care, propane can be more efficient than 70%.

Besides, no costs have been included for coal and ash handling, loss of production and waste of fuel because of the lack of the controlled firing conditions with coal versus propane firing. Maintenance costs will be higher with coal and there will be waste and loss of coal in handling.

All conditions duly considered, we believe the propane costs should be about equal under the conditions you gave in your letter.—Ed.



Ice Plant Installation

South Carolina

We have a prospect for L. P. gas-operated engine for an ice plant to replace 30-hp electric motor because of high operating electric expense. This engine must operate automatically, and be trouble-free from expensive help. Do you know where such an engine can be obtained?

J.L.P.

Several companies manufacture L. P. gas-fueled engines which can be started and stopped automatically. Consult the engine representatives in your area for the proper equipment and method for hooking up the automatic controls.—Ed.



Piping diagrams for tank installations

Nebraska

We are expecting to erect a 30,000-gal. propane storage tank. We will be using a compressor and pump for the transfer of propane from and to tank. We would appreciate some piping diagrams showing tank car and truck unloading risers by being able to use either a compressor or pump. Loading risers, bottle filling risers, etc.

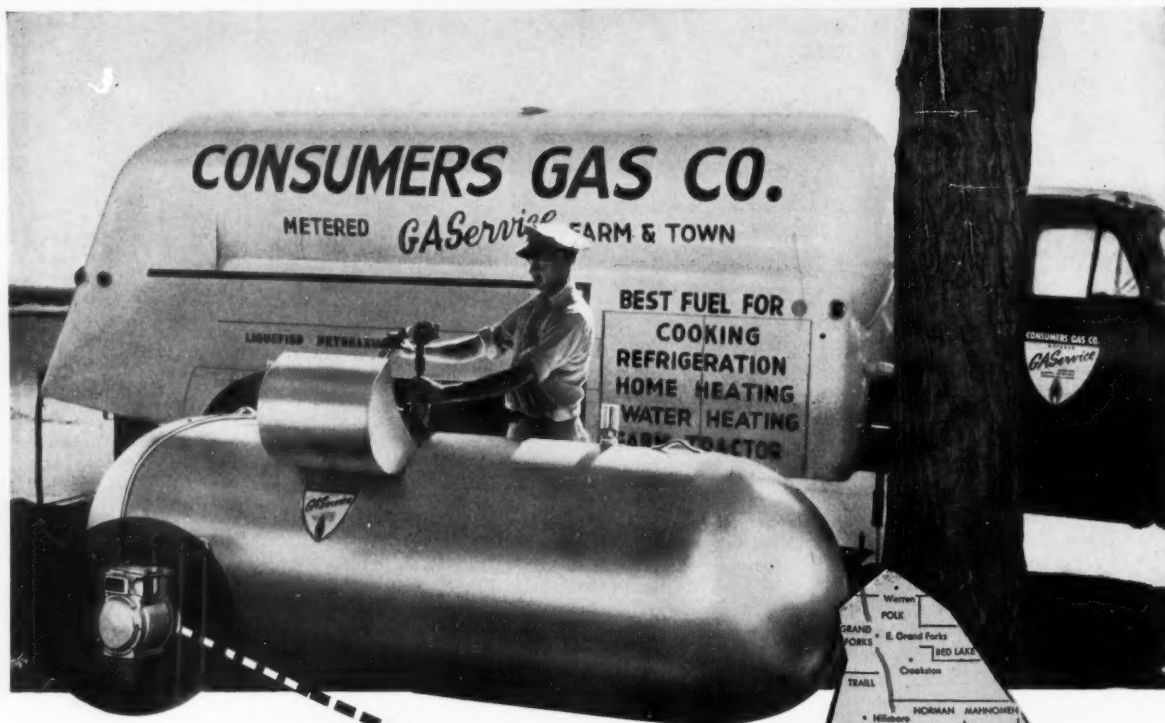
We have several bulk plants but would like to change piping for greater efficiency.

E.J.V.

We do not have piping diagrams or drawings showing the arrangement and sizing of piping for the services which you list in your letter.

The main trouble in most bulk stations which encounter inefficient operation is inadequate size of openings in the storage tank vessels and undersized piping. This is especially true of the suction side of pumps. Follow your pump and unloading suppliers' recommendations closely.

Be careful in selecting excess flow valves and other fittings in the tank outlets. Some excess flow valves have a much smaller pressure drop across them than others.



CITY-TYPE METERED SERVICE for the Red River Valley

Consumers Gas Co. of Detroit Lakes, Minn.
pioneered distribution of LP-Gas through mains.

Serving the highest concentration of LP-Gas customers per unit of area and density of population covered, Consumers Gas Company of Detroit Lakes, provides the ultimate in efficient service to both urban and rural customers with the aid of the watch-like precision accuracy of American® LP-Gas meters. Standard tank distribution is used for customers "beyond the mains".

All customers' tanks are supplied automatically, on the basis of meter readings, assuring uninterrupted city-type service at all times. Customers pay only for what they use, measured by the most accurate method known — the displacement meter. This same exact method of measurement is provided by progressive LP-Gas companies and utilities all over the world.

American LP-Gas Meters are manufactured with the same care that was made American Gas Meters the standard of accuracy for the Gas Industry for 119 years. And American Meter Company has produced more of the 29,000,000 gas meters installed in America than all other manufacturers combined.



Consumers Gas Co. metered service is geared to the needs of large or small users in town or beyond the mains. Every customer can have every modern gas convenience: cooking, refrigeration, automatic water heating, clothes drying, house heating and incineration.

AMERICAN
METER COMPANY
INCORPORATED ESTABLISHED 1899



GENERAL SALES OFFICE: 1513 Race Street, Philadelphia • Albany
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Edmonton • Regina

SUPPLIERS TO THE GAS INDUSTRY for Ironcase, Tinned Steelcase, Aluminumcase and Welded Steelcase Meters • American-Westcott Griffler Meters • Instruments • Reliance Regulators • Provers • Apparatus

Letters • continued

Any restriction which causes a drop in pressure, causes vapor bubbles to form and reduces the flow.

Several of the pump and compressor manufacturers publish diagrams and recommended piping layouts for their equipment.—Ed.



Save money with LPG

Illinois

We are considering installation of a propane conversion burner in an American Standard T-48 6 boiler. In this connection, we have about decided to purchase a Bryant automatic gas furnace for this boiler because we have friends who have installed them in a similar American Standard boiler and have been very satisfied.

In this connection, we would like to use propane instead of natural gas as supplied by our local utility because we think we can save some money; however, we need the advice of an expert on the amount we would have to pay for propane in order to beat the natural gas rates which are from the first 200 therms per month at \$0.10 per therm to over 10,000 therms per month at .04 per therm.

H.E.R.

A therm is 100,000 Btu. A gallon of propane contains about 92,000 Btu, or a little less than one therm. Therefore, the rates which you have listed in your letter, when multiplied by .92 will give the equivalent price to pay for propane to break even with the natural gas cost.

There is a probable hidden cost in the natural gas rate which will increase your yearly natural gas fuel cost if it is used for heating only. This is the minimum service charge. If no gas is used in any one month, or if only a very small amount is used, a minimum charge is billed for the period. This charge should be included in any yearly fuel cost estimate. You will probably be charged for only that fuel consumed if propane is used.—Ed.



How many GPM?

New York

Will you kindly advise how many gpm of propane gas we could expect to reach with a pump on a tank truck under the following conditions:

The tank has 500-gal. capacity. Bottom opening is 1 1/4 in. Propane would have the resistance of one 1 1/4-in. Rego No. 3282 excess flow valve,

three 90° elbows, one 2-in. screen, one union, and 4 ft of hose. Elbows, union and hose 1 in. in size.

Please give the same information if the elbows, union and hose were changed to 1 1/4 in.

G.E.J.

The Rego No. 3282 excess flow valve you specify in your letter is rated to close at a flow rate of 29 gal. per minute when installed in a vertical down flow position. This is your major limitation so it is advisable to leave sufficient leeway between this flow rate and the pump capacity to prevent closing the excess flow when sudden surges occur as the pump starts. It would seem advisable to use a pump with a rating not in excess of 20 gpm to avoid trouble.

It is always recommended that the largest pump suction lines practicable be used in L. P. gas handling. In this case the 1 1/4-in. should be considered the minimum.—Ed.



Odors form problem

Alabama

We have an unvented heater in a real estate office adjoining a dry cleaning establishment. The odor of the dry cleaning plant is not noticeable in the real estate office except when the non-vented propane heater is burning. The odor is offensive at those times and smells much like incomplete combustion of a smoky oil stove.

Is there a chemical reaction between the products of combustion from the gas and the dry-cleaning solvent?

Can we do anything to eliminate this short of installing a vented heater?

S.F.L.

It is always difficult to explain the movement of air and other gases in instances such as the one you describe. You did not state if there were any openings in the wall between the two rooms nor what type of wall separated the rooms. Also, connections to the attic, if any, adjoining openings in outside walls, infiltration through the dividing wall may be ways of odors entering the real estate office from the dry cleaning office. The heated real estate office may have a chimney effect due to an opening near the ceiling. This may cause air to infiltrate from the outside and from the dry cleaning room.

It is hard to say if there is a reaction between the fumes from the dry cleaning plant and products of combustion from the unvented heater since we don't know what cleaning fluids are used. Possibly there is a reaction where the combustion takes place in the heater. Again it may

be a combination of odors that produces the apparent odor. The unvented heater may be improperly adjusted or flame impingement occurs which arrests combustion and produces some of the odors.

Your statement that "the odor is offensive at those times and smells much like combustion of a smoky oil stove" raises a question in my mind. Is the odor in the real estate office distinctly that of the dry cleaning fluid? Or is it only similar in some respects and is actually all caused by the unvented heater? A dirty burner, poor air adjustment, flame impingement, excessive fuel input may each or collectively cause odor in the combustion products.—Ed.



Sand driers

Wisconsin

We have a call for LPG conversion burners to be installed in several sand driers now fired with No. 2 fuel oil at a rate of 75 gph in each unit.

Your help or suggestions will be welcome.

B.O.

It is reasonable to assume that the consumption of L. P. gas in gallons would be only slightly higher than the oil. This is because more complete combustion, better control of the flame to provide even heating and clean burners will produce more efficient combustion.

The liquid type burners can be used providing the kilns are not in a building which requires piping the liquid inside. Check your local and state codes on this.

A vaporizer may be used and gas burners used to fire the kiln. Pilots and safety shut-off valves to protect against flame failure should be included.—Ed.



Outdoor heating

Minnesota

Please tell me if I can use a portable, directed outdoor radiant heater, 48,000 Btu covering area of 100 sq ft. It's an infra-ray, radiant gas heater.

Will this be safe to be used to heat a 1000-gal. propane gas tank outdoors 30° to 40° below?

C.J.D.

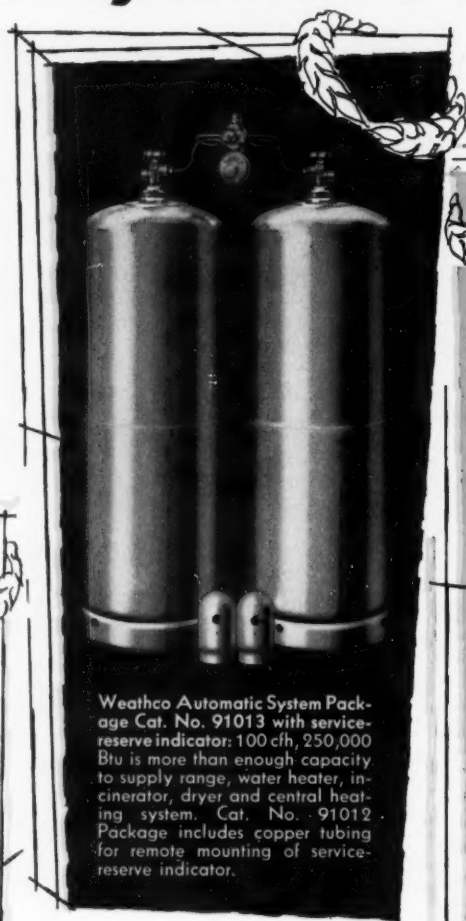
The burner you mention could undoubtedly be used to aid the vaporization in a 1000-gal. tank and could probably be connected so that its use and operation would be safe.

However, we think it would be extremely inefficient and wasteful of heat. We suggest that you consider the use of a small vaporizer. There are several types manufactured. Consult the advertisements in our catalog and the pages of our magazines for their names.—Ed.

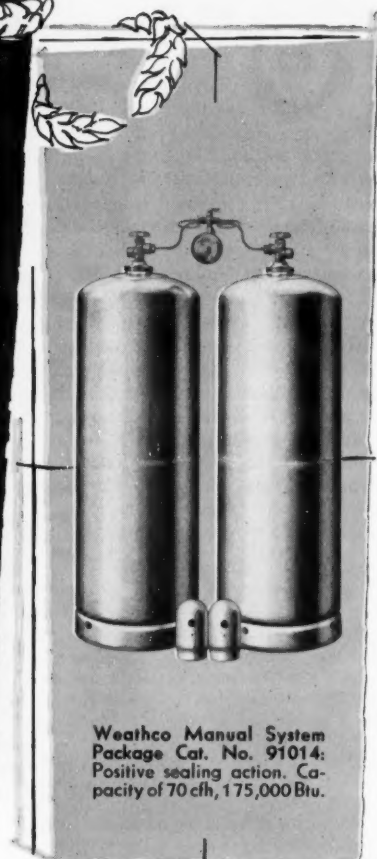
choose any **Weathco**
Complete System "Package"
 and
 you
 pick a
 winner!



Weathco Tee Check System Package Cat. No. 91015:
 Economical, dependable. Capacity of 70 cfh, 175,000 Btu.



Weathco Automatic System Package Cat. No. 91013 with service-reserve indicator: 100 cfh, 250,000 Btu is more than enough capacity to supply range, water heater, incinerator, dryer and central heating system. Cat. No. 91012. Package includes copper tubing for remote mounting of service-reserve indicator.



Weathco Manual System Package Cat. No. 91014:
 Positive sealing action. Capacity of 70 cfh, 175,000 Btu.

... available on five year credit terms

Weathco System Packages are winners in every way. They provide all equipment needed for complete bottled gas installations—two 100 lb. cylinders with valves and caps, your choice of change-over manifold, regulator, pigtailed and mounting bracket. Dependable in performance, attractive in appearance, each Package features the Weathco lifetime regulator with largest orifice for best freeze-up resistance. Weathco Systems can't be beat. Pick a winner—pick a Weathco Package!

For your copy of the new Catalog 1502 on Weathco LP-Gas Equipment, write today to The Weatherhead Company—300 East 131st Street, Cleveland 8, Ohio. Warehouses in Atlanta, Georgia and Memphis, Tennessee. In Canada, The Weatherhead Company of Canada, Ltd.—St. Thomas, Ontario.



WEATHERHEAD

... is showing the way

BUTANE-PROPANE News

beyond the mains



1955 CLOTHES DRYER SALES GAINED 55% OVER 1954. For our industry that's the big news to come out of the American Home Laundry Manufacturers Association meeting in Chicago last month. This was more than double the gain predicted at the first of the year, and it was the highest rate of increase shown by any home laundry appliance. The total score for the year was more than 1.3 million dryers. Nearly as many were sold in 1955 as the combined sales for the first seven years that dryers were offered.

Sales figures do not mean much until they are indexed to the remaining potential market, so let's take a look at those facts. Dryers have now been placed in approximately 10% of the homes in the U. S. Call it 10% saturation if you like -- 90% of the homes still represent present or potential dryer prospects. The dryer has been successfully introduced -- it has become standard home equipment, and the big selling days lie just ahead.

The dryer division committee of the AHLMA has an aggressive sales promotion program outlined for the coming year, and their materials are available through your dryer manufacturer. But these materials alone will not sell dryers for you. Dryers must still be sold through personal effort, and the most effective form of personal effort in selling dryers is still home demonstrations. And the electric competition is still plugging away at its job of selling electric dryers through home demonstrations that are not nearly as effective or convincing as those made with gas.

BULK DELIVERY INAUGURATED DOWN EAST. On Monday, Nov. 14, Suburban Propane Utility-Gas Co., Portland, Maine, inaugurated bulk delivery service for the benefit of its larger customers. Dealers in the upper New England states have generally regarded bulk service as an undesirable innovation because it upsets the status quo and brings in problems like higher investments and unbalanced loads. But the fact remains that bulk service brings lower consumer prices, which in turn result in a broader market. And as always, when there is an economic advantage that can be offered to a customer, there will be someone who will make the offer. Sooner or later it had to be Utility-Gas or someone else.

Continued

Here are the features ★ your next delivery unit should have..

AND ONLY **AMERICAN** GIVES THEM TO YOU

A Custom Unit at Lowest Cost



New super-safe plumbing system increases pumping capacity . . . makes delivery faster . . . saves time and money.



Tanks are locked to truck. Positively won't slip forward . . . a great driver-protection feature in case of accident.



Best balanced units on the road. American delivery units save wear and tear on trucks, give greater safety.



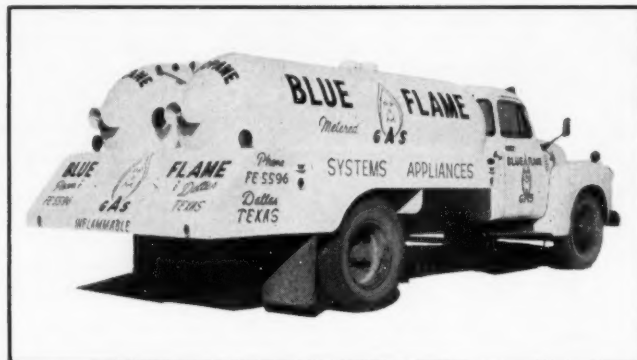
Motor fuel tank and meter mounted in rear . . . can't be side-swiped or sheared off . . . another American safety feature.



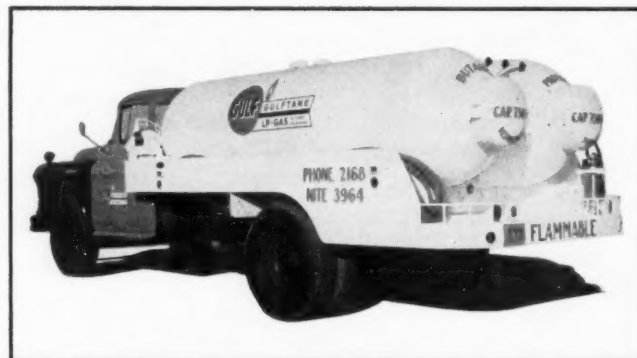
Quick changeover . . . when your long lasting American tanks are ready for a new truck, they can be changed over in just a few minutes . . . another American plus.



Good Looks . . . American delivery units are streamlined and good-looking . . . give you the extra safety you need with the smart appearance you want.



Deluxe Model N17. A completely enclosed, compact unit designed with all controls, motor fuel tank, meter, hose reel, power take-off and clutch controls in rear cabinet. Particularly desirable for dealers in northern areas . . . keeps all controls and equipment clean, fully protected from snow, ice or rain.



Deluxe Model B21. Fuel tank and fire extinguisher located in rear . . . meter and hose on catwalk next to driver. Also available with fuel tank, clutch, power take-off and hose reel in rear.

FINANCING AVAILABLE — Write for Information

HEADQUARTERS FOR THE LP GAS DEALER
1 order • 1 shipment • 1 invoice

Telephone STerling 4916



American Tank

AND MANUFACTURING COMPANY INC.

2136 WEST COMMERCE STREET • BOX 5525 • DALLAS 22, TEXAS

ALSO AVAILABLE AT:

Jackson, Mississippi
P. O. Box 2563
Highway 80 East, Phone 3-8726

P. O. Box 1555
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P. O. Box 689, Phone 228 MX



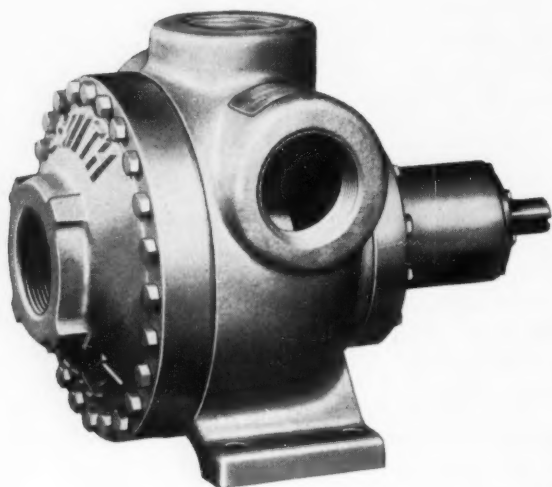
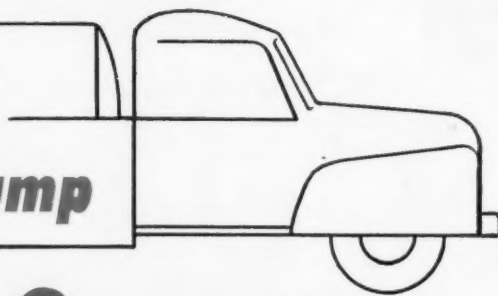
After all, the American standard of living was not brought about by keeping the price of necessities high, but by bringing costs down through the economies of mass production and distribution to such low figures that even people who could not afford the finer things of life became convinced that they could no longer get along without them. Hence the automobile; hence the telephone; hence peas and strawberries that are frozen in Minnesota and Louisiana in June and thawed in New England in March; hence TV; hence LPG. It is all a normal part of progress; we do not reject it, but accommodate to it and learn to take advantage of it.

Barring a miracle which is not yet in sight, New England will never enjoy the low prices for LPG that prevail in places closer to the producing areas. This is a powerful factor protecting the Yankee bottlegas dealers against abrupt changes. The cylinder is still the most satisfactory means of serving the small user. It is industry history that the ratio of cylinder customers to bulk customers remains high where the price of gas is high, and it is New England history that established customs are changed slowly. It is more industry history that the introduction of bulk service into a former bottlegas territory by a marketer already established there leads to far less disruption than the failure of the local marketers to keep pace with the trend, thus inviting the inroads of new operators who have nothing to protect and are out to gain everything in spite of anything.

CANADIANS CONTEMPLATE PROPANE PIPELINE. It is reported that approval of the Canadian parliament will be sought for a franchise to lay a pipeline to carry hydrocarbons including propane from Alberta to Saskatchewan and Manitoba, with the ultimate intention of extending the line east to Ontario and west to British Columbia and the United States. That sounds like a business-like approach of the problem of utilizing the tremendous supplies of liquefiable products in the recently developed wet gas fields. Part of the answer, already developed or well under way, has been the erection of a number of colossal petrochemical plants right in the gas-field area. But this has not come even close to consuming the surplus of light hydrocarbons. If the plan for this 10-in. pipeline goes through, we may see the industries of Ontario and even Quebec enjoying a fuel advantage as compared with our own Northeastern states. And we might even see an extension of the eastern line into New England.

Carl Abell

For Your Delivery Truck Specify a TC-2 Smith Pump



it reduces vapor problems
(difficulty in picking up the fuel).

it develops highest pressures for fastest
filling of both large and small tanks.

it has ample capacity without
overspeeding the engine.

it fills without vapor return where necessary.

it has the longest service life.

We know from many years of close contact with the users of Smith Pumps that you can be assured of all of these advantages if you will insist that the company installing your pump follow the factory recommendations.

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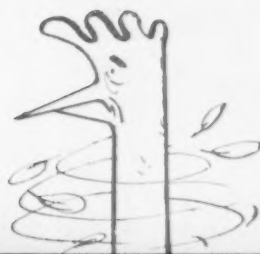
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WHIRLWIND

in a feather factory



One shed full of growing chickens will shed enough feathers to mess up an entire subdivision.

By Carl Abell
Editor

ONE bright sunny day last fall a whirlwind passed through a 12,000-hen egg farm in Orange county, Calif. There had been nearly two inches of cast-off white feathers lying on the ground, and when the whirlwind left the yard was clean. A few minutes later the whirlwind broke up and disappeared over a choice subdivision about a quarter of a mile away. The feathers did not disappear—they settled gently on the subdivision, drifting through the streets and lodging on the lawns, in the shrubbery, and in the corners of porches and patios. An awful stink arose, and it was not the smell of the feathers.

Cleaning up the cast-off feathers has always been a problem with poultry raisers. It is such a problem that many growers have not attempted to do anything about it. They just let them lie around and add to the

general mess, along with the flies, spiders and other elements of uncleanliness that goes with the production of chickens and eggs.

In times gone by the poultry premises were dirty because the owners could not afford to make them clean. Propane can change all that. The propane torch has done more to make possible a decent standard of sanitation in the poultry business than anything else that has ever happened. It is a practical solution because it is both effective and economical. Unfortunately, most poultrymen are not familiar with the propane torch.

Egg production is narrow margin farming. The costs for feed and labor are now so high that the only chance a grower has to make a profit is to mechanize his operation so fewer employees can take care of more hens. Each worker must be able to care





The three great nuisances of poultry farming which flaming helps to control are loose feathers, flies, and spiders.

for from 3000 to 4000 chickens. The aim must now be to eliminate as many as possible of the manual operations that consume employe time, or find other ways to do the same jobs in less time.

Feed mixing

For this reason few of the commercial egg producers mix the feed for their flocks. In the big producing centers this is done by huge machines in the feed store warehouses, and the mixture is delivered not in bags but in bulk trucks equipped with elevators that pour the feed into the top of the grower's storage hopper, from which it flows by gravity into the "buggy" in which he takes it to the laying houses. Nor do the growers clean up the droppings of the hens. This is done by commer-

cial fertilizer processors who come to the farms once or twice a year to remove the accumulation.

In the modern egg farm all the laying hens are kept in individual wire cages suspended at waist height in two long rows under narrow sheds. Watering facilities are automatic. The feed is delivered and the eggs are harvested through a central aisle, generally by men riding on miniature electric trucks which steer themselves and are controlled by the diver's feet, leaving both hands free to perform the job of the moment. Playing nursemaid to 3000 or 4000 hens does not allow time for daily or even frequent cleaning of the yard. The fertilizer and the feathers keep dropping to the ground, and that's where the trouble starts. The feathers and flies multiply and become neighborhood nuisances, besides cre-

ating problems of sanitation for the grower. Where there are flies there are also spiders. They spin their webs wherever they can find protected places under the shed roofs or among the supports. In the course of time the webs fill with fine feathers and various kinds of dust and dirt, making ideal harbors for disease germs and the various parasites that prey on the chickens. Something needs to be done, with the least possible expenditure of time and money, to eliminate the loose feathers, control the flies, and clean out the spiders and their webs.

The propane torch will do more to accomplish these ends, in less time and at less cost, than anything else that has been brought to the poultryman's attention. And few chicken raisers have ever seen what a propane torch will do for them.



Convenient burning outfit (left) for Al Prickett's 6500 laying plant. Cylinder clamps on feed chart—supplies single hand burner. Five-burner trailer



outfit (right) built for 20,000 hen egg farm singes everything under the shed in one trip down the aisle.

The use of LPG torches for cleaning up and sterilizing poultry houses and equipment is not new. Standard Oil Co. of California was conducting experiments along this line before 1930. Several growers in the Petaluma area of California were using torches to sterilize their premises back in those early days. But it did not catch on too well, because of the fire hazards of using flame in the wooden buildings that were almost universally used for poultry housing in those days. During the intervening years poultry buildings have been improved, and the modern construction is principally metal. Torches have also improved. The modern hand torch that is coming to be widely used is light in weight, convenient to carry and use. It has a pilot light and a quick-acting valve to control the main flame. In combination with a regulator and pressure gauge at the tank, it is possible to produce any type of flame that is needed, from a short pressureless flame to one four or five feet long which comes out with such force that it will blow feathers before it.

Pioneer of sterilization

Harry I. Horn Co., L. P. gas dealer of Anaheim, Calif., has been one of the pioneers of the recent revival of interest in poultry plant sterilization. Henry Harms, sales specialist of the Horn organization, was demonstrating a Manchester Power-jet hand burner in controlling weeds for some of his local farm customers. One farmer to whom he was showing the torch had been trying to use a kero-

sene flame thrower around his poultry yard, and the results were not too encouraging—the flame could not be controlled accurately enough, and maintaining proper pressure on the fuel tank required hand pumping, which was a nuisance and consumed too much time. They tried the propane torch on the feathers and spider webs. It took very little experimenting to determine the best pressure for effective work on the ground and under the shed roof. The feathers and webs disappeared as if by magic. In a matter of minutes they had cleaned the entire poultry yard.

That started a deluge of business, but they had only commenced to find out what could be done with the torch. It was several months before all of the benefits became apparent. Most important, they learned that in making a thorough burn of the feathers under the laying cages the droppings were partially dried, and during the summer months this made a noticeable reduction in the number of flies that hatched out in the manure. A large number of flies thereabouts were either killed outright, or had their wings singed off and quickly died.

Late one cool evening Mr. Harms was demonstrating the torch to an egg farmer, and they noticed that flies by the thousand were going to roost on the ceiling. They were sluggish on account of the cold, so Mr. Harms turned the regulator pressure down to get a moderate flame, and waved it rapidly a few inches under the roof. Down came the flies, with wings and legs singed. The aisle was black with their helpless bodies. The

farmer was amazed. "We have been trying to kill those flies with hot wire electric traps," he said, "and you have already killed more than the traps have gotten in all year."

It was also noticed that after the spider webs had been thoroughly burned out the first time, there was little new spider work visible for a long time. The spiders and their eggs were nearly all killed in the first burning, and it took a long time for the remaining few to multiply to troublesome numbers.

Flame sterilization

Poultrymen took to the new method of flame sterilization in increasing numbers. The single burner torch with a 20-lb trailer cylinder for mobile fuel supply was satisfactory for the small poultry farms, but larger operators wanted something with more fuel capacity, and some of the largest producers wanted complete mechanization.

All of the poultrymen have their feed carts, either hand pushed or electric powered, on which the fuel tank could be carried. The Horn organization developed a 100-lb ICC cylinder adaptation similar to the portable tanks which provide the fuel for the air-conditioning engines used on the railroads. It lies on its side instead of standing upright when in use, with clamped-on brackets to hold it in the correct position. The outlet is fitted with a bent tube which extends into vapor space when the cylinder is either horizontal or vertical. When in use, this tank is anchored on the feedwagon, and it contains enough fuel to clean approximately a mile of sheds.

Al Prickett of Orange, Calif., uses such an outfit to clean a 6500-bird installation. About one-third of his birds are young, and since they are still growing they shed a great many feathers. Feathers are burned around their sheds twice a week. The operation takes less than a half hour, using a single burner. Fuel cost is about 80 cents per week for this part of the operation. The clean-up around the laying sheds is done about once a month except during moulting season, when it is required more frequently. Mr. Prickett refills his operating cylinder from ICC cylinders supplied by Horn which are equipped with dip tubes extending



Ceiling has been cleaned of spider webs, feathers burned under right cages.



Henry Harms demonstrates the torch by cleaning two-foot strip at nearly 3 miles per hour.

Feather Factory ... The cost of burning may be figured on time required and gas consumed

to the bottom so the entire contents may be transferred as liquid. Refilling is done immediately after the operating cylinder has been in use, to take advantage of the lower temperature and pressure resulting from the rapid vaporization to supply the torch. By using this method, no special transfer equipment is required. A fixed liquid level gauge is provided in the operating cylinder so it will not be overfilled.

Howell Bros. poultry farm, which now carries 12,000 hens and is building additional capacity to provide for 20,000 birds, figured the operating time with a single hand-held burner, and decided to build a trailer outfit which would burn under both rows of nests and the center aisle in one trip through the sheds. In collaboration with Henry Harms and Manchester Welding & Fabricating Co. they worked out the design for a 100-gal. trailer outfit which includes a boom carrying five adjustable burners. The side pairs and the center burner are on three separate lines with individual regulators and valves so any combination or any separate line may be used as desired. Pulled by the small electric cart which is used for the regular jobs of feeding and egg gathering, and traveling at approximately two miles per hour, this machine will be capable of covering the entire plant in just a few minutes over an hour.

A special advantage of the burner mounting in this outfit is that one or both of the pairs of side burners may be directed upward to sterilize the cages between changes of hens when old stock is sold off and the preparations are being made for the replacement birds. This feature also provides the means of making a thorough sterilization in case they have an outbreak of disease and wish to eliminate all remaining germs in any area of the plant.

Extra care must be exercised when making the first burn of feathers in a new customer's plant. Where the feathers are piled up two or three inches deep they may burn long enough to constitute a fire hazard. Water or a fire extinguisher should

be available to take care of any emergency. Where the feathers are scattered or in a very thin layer the flame consumes them almost instantly and dies out before any of the structures can ignite. In burning spider webs, the torch should be kept in motion, as the webs burn almost instantly. The heat should be just sufficient to burn the legs off the spiders and kill the eggs and the mites and other minute parasites that are concealed under the masses of webs.



Demonstrator tank is refilled from 100-lb. ICC cylinder with dip tube extending to bottom.

The cost of burning may be figured on the basis of time required plus the cost of the gas consumed. With the small Manchester Power-jet burner operating on 35 to 40 psi pressure, which is the usual condition for burning feathers on the ground, fuel consumption is approximately 5 gal. per hour. Where the feathers are extra deep, somewhat lower pressure should be used to keep from blowing the feathers away ahead of the flame. Pressure used for spider and fly control on the roof structure is only about 10 psi. With this pressure fuel consumption drops to around 1 gal. per hour.

If weed oil or disinfecting oil has

been applied on or around the cages, no burning should be attempted for about two weeks following the application, as there may be concentrations of the oil remaining where it could become a fire hazard. After the torch is in use, these oils are no longer necessary, as the sterilizing effect of the flame takes their place.

The torch also provides a quick and economical method of controlling weeds around the yard fences and between the poultry sheds.

The first clean-up takes a little more time and consumes more fuel than the subsequent treatments. After the routine is established, fuel consumption should be relatively steady throughout the year with

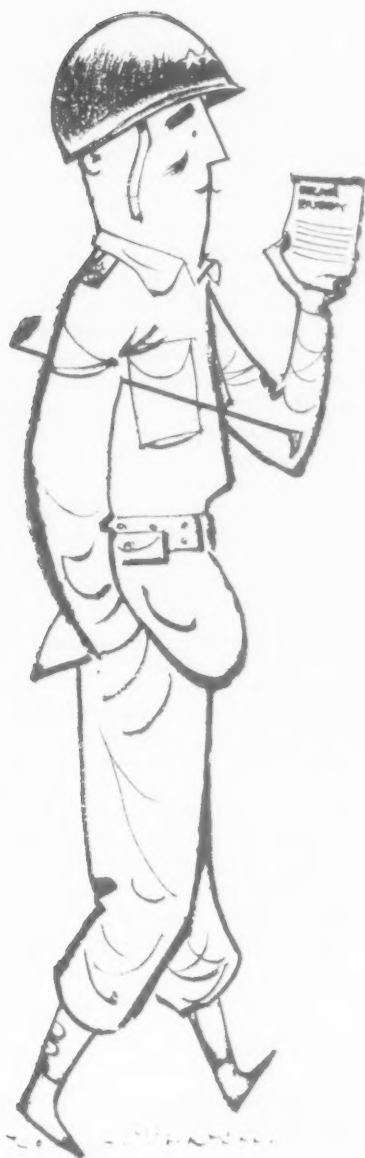
slight peaks during the spring and fall moulting seasons. A good job can be done on the basis of 10 gal. per month per 3000 birds in the flock. Whether this fuel is delivered in bulk or in cylinders, it is still a nice addition to the dealer's steady volume.

Like many other special applications, this business will not sell itself. Until the practice is well established in the community, the dealer must demonstrate to sell. But there are few other types of use in which a good demonstration is so sure to make a sale. The poultry farmers just haven't seen anything like it for cleaning up the premises so effectively and at such low cost. ■

Credit and collections:

How, When, Where???

A. B. Buckeridge, Manager, Memphis Consumer Credit Assn.



BEING one of those credit veterans, I can look back over a period of 35 years and compare the fundamentals of those days, when we had only a couple of hundred Credit Bureaus, and today when we have over 1700.

The fundamentals haven't changed. The original Bureaus were started with the idea of having every mem-

ber report every unsatisfactory account to the Bureau, check every new account through the Bureau and reject those applicants who had paid others too slowly or not at all. It worked then. It still does now.

Pessimistic prophecies of the past

There have always been more pessimists than optimists as far as credit is concerned. I remember 30 years ago when alleged economists stated that with so many people so heavily in debt, *if we ever had a depression* the business structure would collapse. The depression came and went, and the structure didn't collapse.

I remember when they originally passed the Soldiers and Sailors Civil Relief Act, and economists prophesied that every man going into the army would load up with merchandise. That didn't happen and the ultimate losses from servicemen's debts was infinitesimal.

Even today, there are prophets of gloom in our midst. Just recently the *Wall Street Journal* made a survey and reported that the debts of this country, both private and public, may be getting close to a precarious level.

They quoted one government official as saying the expanding debt must be watched with care "or you may find it tumbling down on your head if the economy falters in any way."

Business cannot help but be good as long as so many millions are employed; there is such a terrific amount of war orders still on the books and with such a great national income. Just think of the billions that people are still socking away in savings accounts every year.

The extension of credit *will not* cause any set-back because credit executives *know when to tighten up*.

Charges to bad debts are still below normal so there is no reason for alarm. Within the past month I saw charges of department stores with volume to profit and loss by a large number running from \$1 million a year up. The average loss reported was around $\frac{1}{4}$ of 1%, whereas the figure we always regarded as pre-war normal was $\frac{4}{10}$ ths of 1%.

Credit as a sales force

Everyone has a keen interest today in the extent to which credit can be used as a means of maintaining a high level of sales. There is plenty of room for expansion by using sound credit terms.

Advertising terms and assimilations

Advertising credit terms are inconsequential. No matter how you get people into a store by the promise of no down-payment and centuries to pay, the credit department is the medium between insanity and reality. After all, it is the consistent advertising, the *type* of account, the *timing*, the *quality* of your merchandise, *service*, and the *promotional effort* that brings good customers into your store.

But when your advertisements bring in individuals of various standards, the credit executive goes into action, screens the applicants, chooses those who will be profitable and rejects those who pay too slowly or not at all.

A common mistake in collecting is to place too much emphasis on the fear psychosis. The psychology of collecting is to assume the debtor is honest. Don't write him "when we opened your account we assumed you were honest." That is distinctly brushing him the wrong way.

Reminds me of the jewelry collec-



tion letter I saw in New York several years ago. It started with, Dear Buddy: (Please notice that chummy salutation of "Buddy") Then it went on with the following: "Unless this account is paid at once, we will tell your commanding officer."

I remember a collection letter we sold in New York to our members. it was on our Association stationary as if the letter was coming from us. All of a sudden we got complaints from the debtors of a certain store. The credit manager had been writing on the bottom of the mimeographed letter "Unless this account is paid immediately we will notify all your neighbors."

Then once in Saginaw, Michigan, we found a grocer's wife had been taking our confidential bulletin to her ladies club and disclosing the names of friends (not at the meeting) who had been reported under adverse information.

Further on the fear psychosis, when we were buliding up the collection department of the New York Bureau we worked out a *masterly* series of collection letters. One was to the man who had good credit and the account received for collection was the first bad mark against his name. We wrote on how he should maintain his good credit standing.

The next scientific approach was to the man with a slow record—it was worded accordingly—down to the man with countless uncollectable judgments against him. We gave him the *works*.

One day, a typist made a mistake and sent the No. 1 keep-your-credit-good letter to a batch of deadbeats. To our great surprise, we heard from a number of them with payments on account.

Which means you can collect more flies with honey than with vinegar and even delinquent debtors like to

be assumed *honest* by their creditors.

A friendly approach is the best way to collect. A great many of the nation's best known stores have had their collection letters re-worded by advertising agencies or public relations experts. These advisors specialize in taking out the *sting*, and putting in the *sales appeal*. They stress the *pride* of a charge account; a *good credit rating*. They point to future special sales which the debtor should be in a position to take advantage of.

In collecting it is consistency that counts. A planned follow-up letter and telephone call impresses the debtor that the account must be paid. I have heard many old-time credit managers remark that it is not so much what you say in collection letters so long as you say it kindly, but the *constant repetition* that brings in the money.

Always remember that the average customers, even as you and I, has more bills to pay each payday than he has money to pay them with. So he pays the firms that impress him as being important.

If you have a loose collection policy, debtors have a sort of intuition and know it. You have a great deal of *competition* for the customer's dollar. The landlord, the grocer, the payment on the television, automobile, washing machine, sewing machine, etc., all come into the picture. So remember the old slogan about the success of the army who gets there firstest with the mostest.

On talking with delinquent debtors, always try to get them to agree to a definite date when they will make the next payment. Get the date

even if you have to yell it as they back out the door.

The best and shortest collection letter ever written was by the famous Mark Twain,

On the second statement, he wrote "Please".

On the next statement, "Please, dammit".

Speaking of tactful letters, I always think of the one which resulted from a tourist finding a bedbug in his bed on a luxury liner.

On the arrival home, he wrote the president of the steamship company.

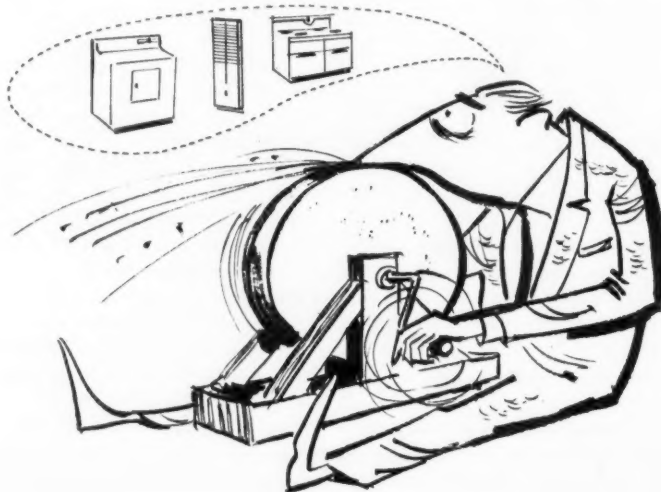
In reply he received the *most beautifully phrased letter* he had ever read. The president took it upon himself to personally apologize; it had never happened before in the history of the steamship line; they had reprimanded the Captain, disciplined the purser, discharged the maid, ordered new linen for the entire liner, and it would never happen again, *thanks to him*.

Suddenly he noticed a little slip of paper had fallen from the envelope. He picked it up and read—"Mary, send this S.O.B. the bedbug letter."

Cooperation with your bureau

In your relations with your credit bureau, it is a case of give and take. You take out what others have contributed. But you have an obligation to give.

The first essential cooperation with the Bureau is to report every unsatisfactory account promptly. Today that function is a *MUST*. Your headaches are the life blood of the Credit Bureau system. The Bureau's spec-





ialty is collecting bad news and they turn it into a profit for other members. There are many newcomers in business today who may not realize the importance of reporting their derogatory items.

Recently we were making a special investigation and ran into a repossession by a furniture store.

We called on the member and they showed us a postcard which the debtor had sent to them the day he skipped to another city. It read as follows:

"Dear Sirs: We are unable to make the payments on the furniture we purchased from you. You will find it all at 3139 Jackson Ave, EXCEPT the stove. We had to sell the stove to make the last two payments. Sincerely yours. . ."

Truisms to remember

The debtor who is seriously delinquent buys elsewhere. On the other hand, when your insistence causes him to pay in full, he may be mad at you temporarily but he soon forgets and comes in to trade again.

Columnist Robert C. Ruark wrote a fine article on credit a few years ago. He stated that America has a high standard of living because so many people have to keep their noses to the grindstone.

He told how a man went into hock to buy a washing machine, for example, and then had to sweat to make all the payments. But when he had made the last payment his home was enriched by a permanent possession

which made his wife's work easier. And by keeping his nose to the grindstone the man accumulated furniture, a radio, television set and many other articles once called luxuries but now considered as necessities of life.

A credit applicant gave as reference the name of his minister and Sunday School teacher.

The credit manager said "I know you are good on Sundays—what I want is some references who know you during the week."

When you have a hunch regarding an applicant for credit; the way he looks or something he says or does, always convey your hunch to the Bureau when you request a report. It enables the Bureau to dig deeper than usual and it's amazing how many times the Bureau can prove that your hunch was right.

It's another truism that when an applicant is thin-skinned, doesn't want any investigation made or his employer called, there is a reason for his not wanting to be checked on.

Often you find that he has something to hide. If he is unreasonable in opening the account, you can imagine the trouble you will have on complaints regarding merchandise or when his account becomes delinquent.

When I was with the Saginaw, Michigan, Bureau, we made a check-up on the people who didn't return books to the public library; also on people who made pledges to their churches but never paid them. We discovered most were the same

people who didn't pay their retail bills.

A year ago in Memphis we discovered in posting automobile traffic fines of \$25 or more which means serious violations, the heaviest percentage was on individuals who had a very poor credit standing. Which shows that people who pay no attention to the rights of other auto drivers have the same attitude toward their creditors.

Televisions on trial with no down payment have created a new class of debtors who use the machine as long as the patience of the seller holds out; then when he takes the machine back and rings up "no sale," they cheerfully call the next firm for a new trial machine.

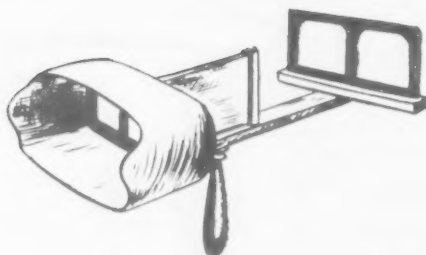
It's downright embarrassing at times for deliverymen who have to wait in line while another firm is taking back the old machine so they can get in with the new one.

Another distinct trend today is the large number of debtors with bad to-worse credit records who are desperately trying to get credit. They go from firm to firm hoping to find a careless credit manager or a loose credit policy.

Your local credit bureau knows more about the paying habits of your customers than anyone else in the community, because it has access to the pooled experience of most of the local business people. You can save many dollars and countless hours of unproductive collection work by drawing on this fund of information and helping to keep it up-to-date. ■

HIGHLIGHTS

from the Parkhill Album



C. L. PARKHILL is one of the real old-timers of the liquefied petroleum gas business on the Pacific Coast. He does not rate as the father of the industry—that honor is accorded to the late Andy Kerr. But he is certainly recognized as midwife and nurse to the infant LPG industry.

"Park" came into the picture as a partner in the firm of Parkhill-Wade, consulting and construction engineers, Los Angeles, specializing in the design and building of refinery and oilfield installations to meet special requirements. Parkhill-Wade were pioneers in developing equipment for producing and storing L. P. gas.

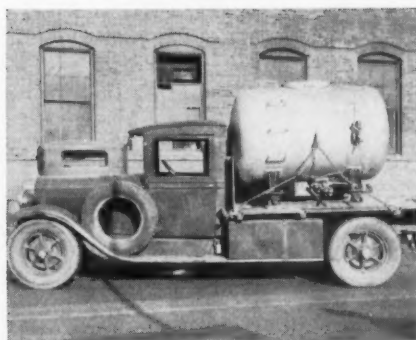
Back in those early days when the industry was still living in three-cornered pants, LPG was principally butane. It was used almost exclusively for domestic cooking, and was marketed only in cylinders. Carburetion and the industrial uses other than metal cutting had yet to emerge from the experimental stages. Bulk storage and transportation were still unknown. But the clean blue flame intrigued the fertile, restless mind of man, and out of his dreams came new uses and the tremendous expansion of known uses, and from volume came the necessity to handle the new fuel in larger quantities

and at lower cost. The dawn of the gas-fired era beyond the mains was on the horizon.

The dark depression years of the 1930's saw the foundations laid for much that has become the standard equipment and the accepted practices of the L. P. gas industry of today. In that period most of the industry things that we accept without question and use every day had to be developed from the raw idea and built for the first time. The equipment was necessarily crude. Precedents were lacking. Ideas, principles and codes had to be borrowed from other industries.

Thus the depression years became the era of prototypes from which much of today's progress can be dated. No one of these developments can be completely credited to an individual—the equipment that we know and use today was developed from the cumulative ideas and experiences of many people. But many of our present designs, practices and standards in the bulk storage, transportation and use of LPG were originally created or heavily influenced by the mind and hand of C. L. Parkhill.

We take pleasure in presenting on the following pages a group of historical record-photographs selected from Mr. Parkhill's albums of his activities in the industry. ■



This was one of the earliest bulk delivery trucks used in the industry. Since it was used only periodically, the tank was mounted on rollers so it could be readily removed to make the flat-bed truck available for other uses. It was equipped with a hand pump—capacity about 2 gal. per minute in the hands of a strong operator—and was anchored in place by log chains and a “binder.”



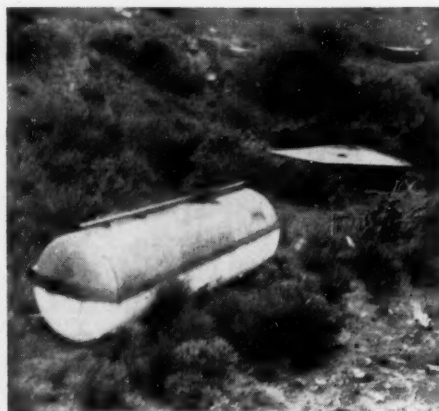
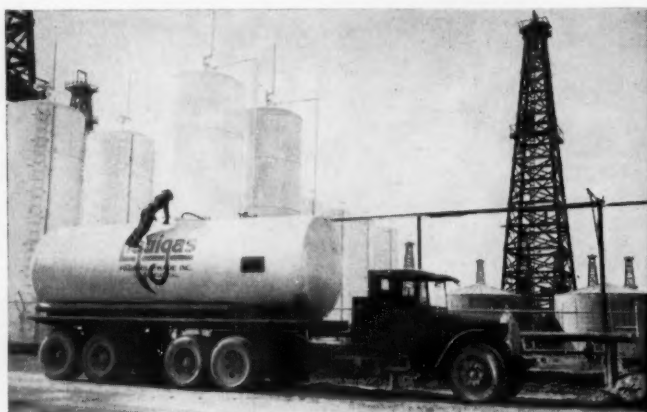
Jackson Brothers (Stove Oil Co.), Turlock, Calif., were among the first to go into bulk domestic service. Their storage tank stood on high steel legs (no longer permitted) so they could fill their bulk truck tanks by gravity. Their original bulk truck, with converted domestic tank, is shown along with their modern modern (1935) specially designed bulk truck, the engine of which operated from the cylinder on the running board.



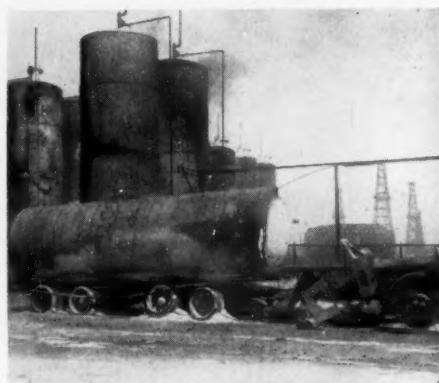
The first motor fuel station installed primarily to market butane to motor truckers was Parkhill-Wade's Truck Fuels Inc. station in Fresno, Calif. (To stay in business it also sold gasoline.) Manager was Marion Nelson, now on the head office staff of Suburban Gas Service Inc., Upland, Calif.

Added source of revenue for Truck Fuels Inc. was cash-and-carry business in domestic cylinders. They came with all sorts of conveyances, but with one thing in common—a desire for the convenience of gas cooking that made them willing to accept the transportation hazard.



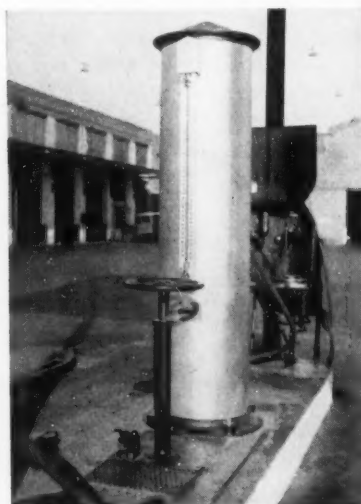


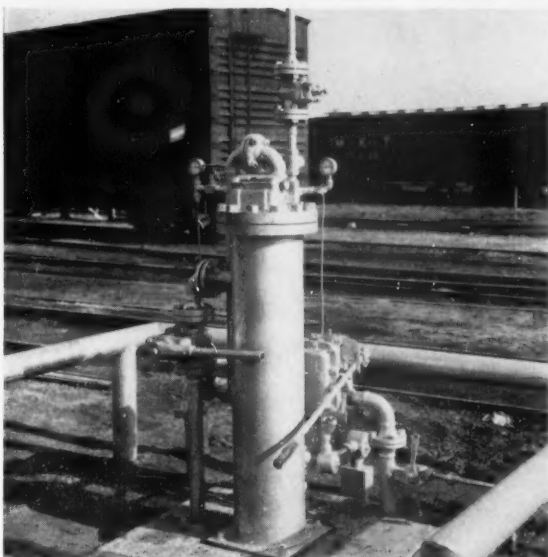
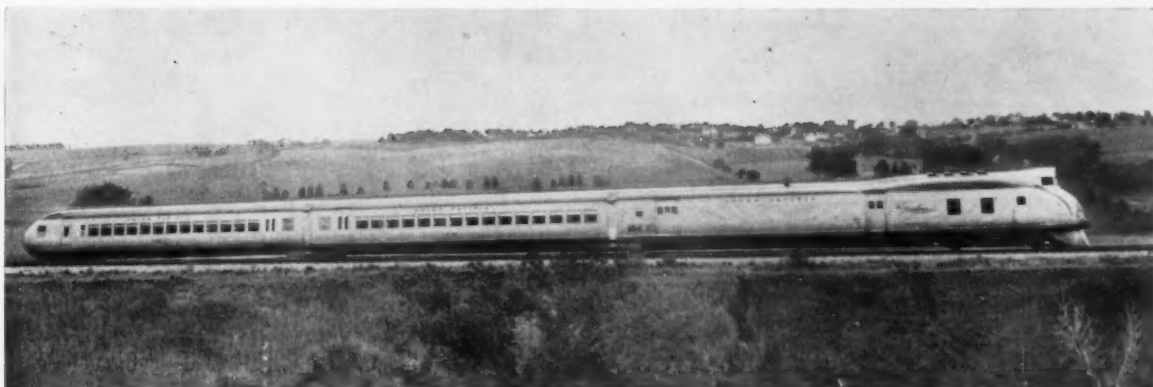
As bulk sales increased Parkhill-Wade became a wholesaler. It built the first 5000-gal. transport, equipping it with recessed valves and fittings as a safety precaution, and began transporting fuel from the Los Angeles area to the San Joaquin Valley. One day the brakes failed on the Ridge Route, and the truck went over the grade, killing the driver and knocking the tank off the semi-trailer bed. The tank was recovered from the canyon bottom, with valves and fittings undamaged and the full cargo still in the tank. The outfit was rebuilt and returned to service. Some time later the outfit was caught in a refinery fire while loading, and all combustible parts of the truck were burned. The pressure relief valves functioned normally, protecting the tank against rupture. The light smudge along the bottom of the tank in the picture is frost which lingered after the fire was out.



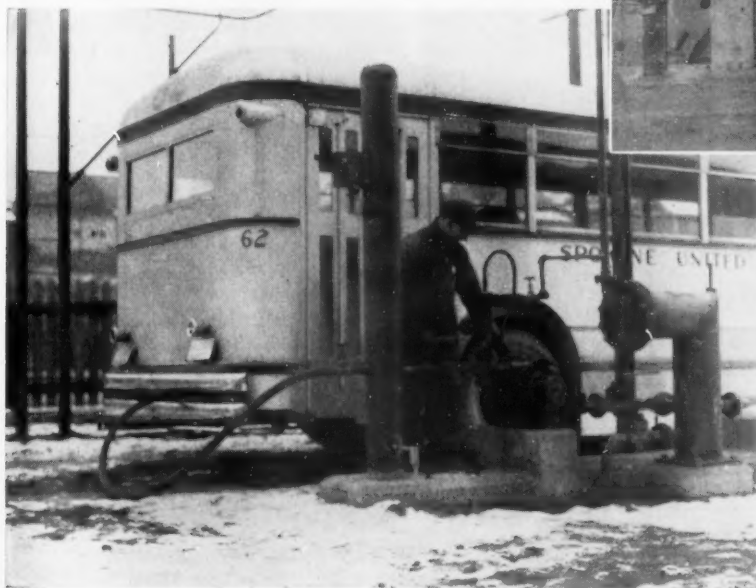
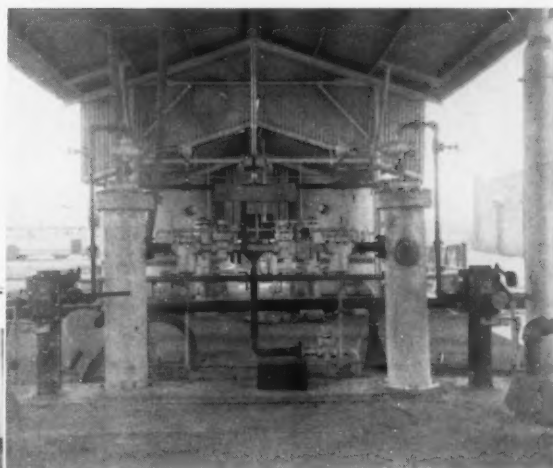
Below: The Los Angeles Electric Railway (bus division) was one of the first fleets to run an operating test on butane. There were no pressure fuel dispensers available, so Mr. Parkhill designed and built this one. It operated by filling the cylinder with liquid fuel from the pressure in the underground tank, and then displacing it with water from the city main to force the fuel into the bus tank. The water was in turn displaced as the cylinder refilled with fuel. It was the first LPG dispenser to measure its throughput in gallons.

The Golden West ranch, near Santa Ana, Calif., was one of the first to operate big tractors on butane. These three "Cat Sixties" had already been high compressed (by your editor and associates in the Ethyl Corp.), so conversion was a simple job of mounting the fuel units.





The "City of Salina," Union Pacific streamlined train, operated a daily schedule of 520 miles, filling with butane at the Salina yards. For complete safety the dispenser had a "dead man control"—that is, it had to be held in the operating position. The instant the operator let go of his lever, everything stopped.



The Spokane United Railway began a test in January 1935, which resulted in the conversion of its entire fleet. These buses were the progenitors of the Twin Coach LPG models which make up the Chicago Transit Authority's downtown fleet. The two vertical cylinders with the heavy bolted caps were the metering fuel dispensers for this fleet.

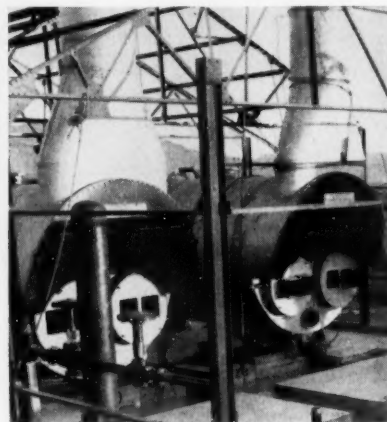
Highlights from the Parkhill Album



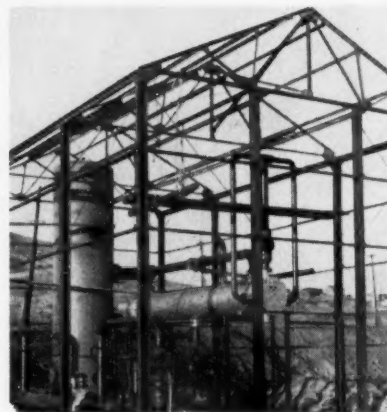
Cajalco Dam, the terminal reservoir of the Los Angeles Metropolitan Water District's aqueduct, was built with a fleet of converted dump trucks operated by Griffith Co. Work started in 1935. Some of these same trucks, now more than 20 years old, are still in service.



The 150,000-gal. standby storage plant of the Montana Power Co., Butte. This plant supplied air-gas mixture to replace the regular utility gas when the mains were ruptured by shifting earth, which happened rather frequently. The plant was an early "automation" job, with steam boilers automatically held at 5 psi for vaporization, and the standby rigged to cut over automatically whenever the pressure in the mains dropped 3 lb. The plant was completely automatic and unattended.



Boiler Plant



Vaporizer and Vapor Separator Tank

BUTANE-PROPANE News



The Agip company is marketing a small container-burner which is useful as a cooking appliance or as a lamp for campers.

Rural Italy is cooking with gas

Giovanni Coppa-Zuccari

THE L. P. gas industry in Italy is booming; 1954 consumption reached 136 million gal., up 22.8% over 1953. The 1955 figures are expected to reach 160 million gal.

Practically the entire supply is consumed by domestic users, of which there are now more than 5 million. It is used mostly for cooking, and to a lesser extent for water and comfort heating. Industrial progress has been slow. Carburetion is just beginning to show signs of development. Most of the market is in rural homes away from the utility gas systems. Freedom from smoke and soot seems to have an irresistible appeal to the housewife there as elsewhere, even though her use of heat is limited. The average consumption per customer is 27 gal. per year.

Production of liquefied petroleum gases in Italy dates from 1938, when it first became available as the result of expansion of Italian refineries. Output has been increasing steadily,

especially since World War II. Consumption has also increased rapidly, which has required the importation of considerable quantities to meet demand. In spite of recent rapid growth in use, production has recently been catching up with consumption, as is shown in Table 1.

At present, liquefied gases are sold in Italy in three sizes of containers holding 10, 15, or 25 kilograms (22, 33, or 55 lb), and sold at 144 lire per kilogram (10.7 cents per lb). The users generally imagine that the lower proportionate cost of bigger containers is meant to inveigle them

into purchasing larger quantities at the time. The public forgets that the cost of manufacture, upkeep and testing of a large container are much the same as those of a small one. Which means that each kilogram of liquefied gas sold in a small container is burdened with heavier costs than the gas sold in bigger cylinders. A similar thing happens as regards the cost of transportation. A container holding 10 kg. of gas weighs 13.5 kg.,



exclusive

Fantastic developments are under way in the land of olives and opera. Five million Italian housewives cook with L. P. gas, although until just recently Italy had no domestic production.

Italy...Four principal companies distribute about 90% of the LPG consumed in Italy

but the container holding 15 kg. does not weigh 20.75 kg. but only 17 kg. This means that the gas transported in larger containers is burdened with about 24% less dead weight.

There are several other items of cost, such as filling, handling, accountancy, etc., which are much the same for big and small containers which means invariably that extra charges have to be borne by gas distributed in smaller containers.

Today there are many companies in Italy distributing liquefied petroleum gases, but most of them are purely local. As the use of such gases has been meeting with great public favor, and as the distribution of them was a pretty lucrative business until about 1953, many people turned their attention to it. Today there are four principal distributors (in alphabetical order): Agipgas, Butangas, Liquigas, and Pibigas. It is impossible to establish their relative importance but taken together they distribute about 90% of butane and propane consumed in the country.

Butangas Co. was the first to import liquefied petroleum gases into Italy and for about three years they supplied the whole of the country. Today they own well over a million containers and operate four filling

centers (Milan, Naples, Porto Torres, and Catania).

Agipgas, a company affiliated with E.N.I., is a newcomer in the field but by dint of an unusually generous consumer policy they soon captured a large market. In 1952 they started extracting butane and propane from "damp" methane gas discovered at

gas produced at Cortemaggiore, especially as the E.N.I. Group to which it belongs controls four refineries (IROM at Porto Marghera, SARN at Novara, and STANIC at Leghorn and Bari) which produce propane as a by-product of the manufacture of gasoline.

The company operates filling station at Fiorenzuola d'Arda, Messina, Naples, and Porto Marghera. These stations can fill about 6000 containers in an eight-hour shift, thanks to their up-to-date equipment, including continuous conveyors and refrigerating

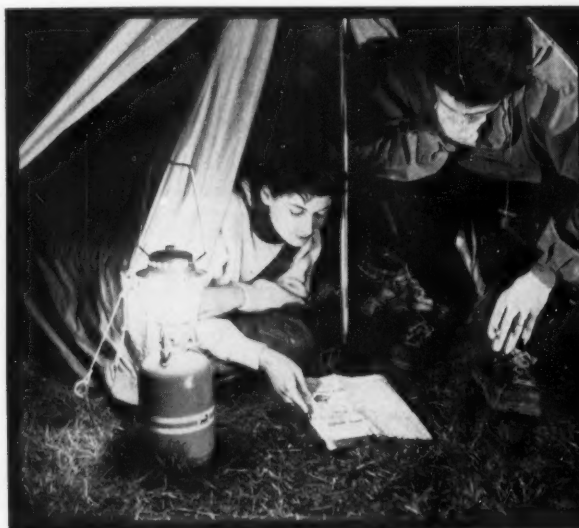
TABLE 1. Italy's production of LPG is catching up with consumption

Year	Consumption, Tons	Production, Tons	Percent Imported
1951	69,000	35,000	49.3
1952	120,000	65,504	45.4
1953	195,000	129,113	33.8
1954	290,000	223,776	22.8

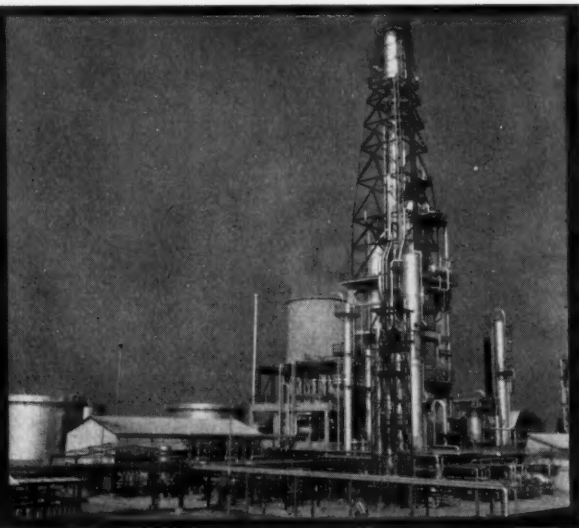
Cortemaggiore. In that year only 9000 tons of propane was produced, but in 1953 this figure rose to 18,000 tons, and in 1954 to over 23,000 tons. A somewhat larger output will be recorded during 1955. The maximum that can be produced at the plants existing at Cortemaggiore is 35,000 to 40,000 tons yearly. The gas produced at Cortemaggiore is collected in large tanks and then transferred to filling stations in tank cars or tank trucks.

Agipgas, however, does not limit its activities to the distribution of

plants. Five more stations are being built at Leghorn, Fabriano, Cagliari, Palermo, and Bari, while additional establishments are planned in Lombardy, Liguria, Apulia, Latium, and Abruzzi. Gas is distributed through 130 concessionnaires and 14,000 local distributors to about 1,600,000 users. Two tanker ships, 76 railway tank cars, 24 tank trucks, and 500 other motor vehicles are used for transportation. The company owns over 2½ million containers, most of which are of 10 kg., 15 kg., and 30 kg. (66 lb.)



Used as a lamp, the unit gives a good, efficient light for these campers.



A substantial portion of the LPG consumed in Italy is produced at the AGIP refinery at Cortemaggiore.

size, although some hold 100 kg. (220.5 lb) of gas. This latter type has been developed for industrial use. Recently the company launched also a small cylinder holding only 1.3 kg. (2.87 lb) of liquefied gas to operate campers' cooking ranges or lamps.

As a rule, Italian users of liquefied gases buy their supply one container at the time and keep it in the kitchen not far from the cooking range. Recently, however, in the case of buildings with several flats, the method of building a special cabinet with several containers is being adopted. This not only provides greater safety but spares the user the necessity for keeping an unsightly cylinder in his kitchen. The cylinders are handled only by expert personnel which makes sure that there is never a shortage of gas. As larger cylinders are used in such cases, there is economy, too.

The advent of the state-controlled Agipgas aroused a bitter feud.

Consumer interest

The company declared that the interests of the consumer were its foremost concern and proceeded accordingly. It reduced the price of 10 kg. lots of gas from 2600 lire to 2200 and subsequently to 2000 lire. When the government tacked a manufacturing tax upon each container of gas sold in the country, Agipgas announced promptly that it would pay the tax out of its own pocket and not transfer the burden to the consumer. Bitter polemics ensued and the company was accused of unfair competition. In reply to this, Agipgas published a list of 17 private companies of which 10 sold gas, like AGIPGAS at 2000 lire, while the others sold it even at lower prices ranging from 1700 to 1300 lire. The company argued that if small private concerns could manage to sell gas at 2000 lire, the large ones could sell the gas even more easily.

Deposit on containers

Another innovation introduced by Agipgas was the abolition of the deposit for gas containers. This irritated its competitors because it has caused them a good deal of expense and inconvenience. As noted, each purchaser is charged a deposit on the



Cylinders are shown riding the conveyor line at the Nuovo Pignone factory in Florence, where they are manufactured.



Containers must pass through this tank to be checked for leaks at the Agipgas bottling station at Porto Marghera.

Italy...Because of low average income, most equipment is simple and inexpensive

metal cylinder in which the gas is supplied to him. This is done in order to ensure that the cylinder is returned to the company when empty. At the same time, of course, it acts as a sales resistance in lining up new users. The abolition of the deposit promptly increased the number of new users, but it made the recovery of the empty containers slower and more uncertain, freezing a larger share of capital in an increased number of containers.

Users increased

Attacks against AGIPGAS became more and more bitter and filled whole columns in newspapers, but the company went ahead with its policy. In any case, it seems that its policy did it no harm for we note that the number of users it serves in southern Italy increased from 258,000 in 1953 to 600,000 in 1954, which

makes a spectacular jump of 135% in one single year.

It is said that today Agipgas itself no longer likes the "no-deposit" principle, for it has caused the loss of a large number of containers. In some cases poor people sold Agipgas' containers as junk and obtained their next supply of gas from some other company.

Distribution

Each of the big marketing companies has worked out its own method of final distribution. In a great many localities the cylinders are handled through local agencies, in many cases the established local fuel vendors who have in the past supplied charcoal and firewood. Each company has its own program for promoting sales. In most cases these include the supplying of cooking equipment to prospective users.

On account of low average income, a great deal of the cooking equipment is very simple and inexpensive, consisting most frequently of hot plates or small ranges. Fuel consumption per cooking installation is only about one-third as much on an annual basis as in the United States, which accounts for the small size of the containers most frequently used. But the rapid increase in number of domestic customers has been phenomenal, and appears likely to continue. ■

Correction

In the story covering the Oklahoma L. P. Gas Association convention in the December issue of BUTANE-PROPANE News (page 114), we credited K. R. McHenry, Radio Corp. of America, with the statement that more than 120,000 Oklahoma companies have invested in 2-way radio systems. Actually, what Mr. McHenry said was that "more than \$120,000 has been invested by Oklahoma companies in two-way radio systems."



At the Agipgas bottling plant at Messina the cylinders ride high between docks and filling house.



Filled cylinders lined up in close order await shipment from Butangas Co.'s filling plant at Milan.



"Don't overpay your taxes..."

That's the advice of the American Institute of Accountants, the national professional organization of certified public accountants. Here are some points to consider carefully.

WHETHER the federal income tax rates are cut or not, you may be able to cut your own tax bill—honestly!

To do this you need to know the tax effect of various choices. Your choice of a method of handling a particular transaction can raise or lower your taxes, and sometimes you can save money by a legitimate shift of taxable income or deductions from one year to another. You are also allowed choices in your treatment of certain items in your tax return, such as depreciation and research costs.

Many businesses could reduce their tax burden if they were aware of the tax considerations affecting a variety of transactions. The most feasible means for many businesses to keep alert to tax saving opportunities is frequent consultation with a properly qualified advisor. If the firm retains a certified public accountant or a firm of CPAs, there should be tax consultations not just

once a year when the filing date approaches, but throughout the year as decisions are made which will affect the tax.

Choice of depreciation method

Certain tax-saving steps are still possible at tax-filing time. One of them is the proper choice of depreciation method. The first step is to determine the estimated useful life of any asset acquired during the tax year. Every businessman should have a copy of "Bulletin F," which contains tables of "average" useful lives. It is available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 30 cents. The tables provide a guide, but it is not necessary to follow them exactly.

The simplest method is straight-line depreciation. It may also be the best in your particular case. Just divide the cost (less what you expect to sell it or trade it in for when it is replaced) by the number of years of estimated useful life, and this is the amount to be deducted each year. In arriving at the original cost, don't forget to include freight and installation charges in addition to the price paid for the equipment.

The law now specifically permits several other methods of depreciation for new assets having a useful life of three years or more. One of them is known as the declining balance method. In the first year the depreciation rate is twice what it would be under the straight-line method. The next year the same rate

is applied to the amount remaining to be depreciated. This process is repeated each year.

The result is that a greater proportion of the cost is depreciated during the early years of the life of the asset.

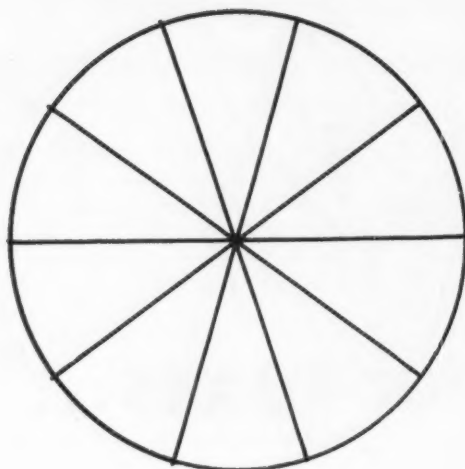
Another new method, known as "sum of the years' digits," has a similar effect. You should figure depreciation on a new asset in all possible ways so that you can decide which is best for you and make the proper choice.

These methods of rapid depreciation may be particularly helpful to a company which is currently making large outlays for new equipment, but the depreciation left for the later years of the asset's life will be less than under the straight-line method. The best method depends upon the circumstances of the individual company, and is also affected by such imponderables as estimates of future earnings and tax rates during the life of the asset.

Research and development

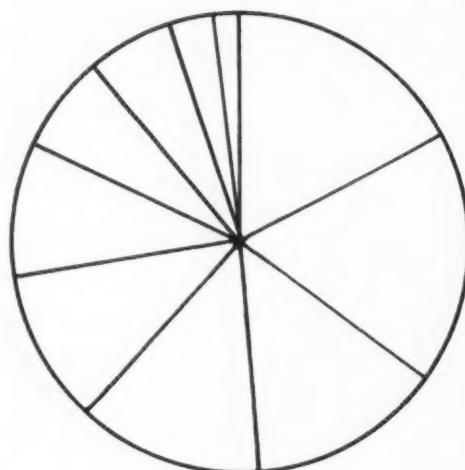
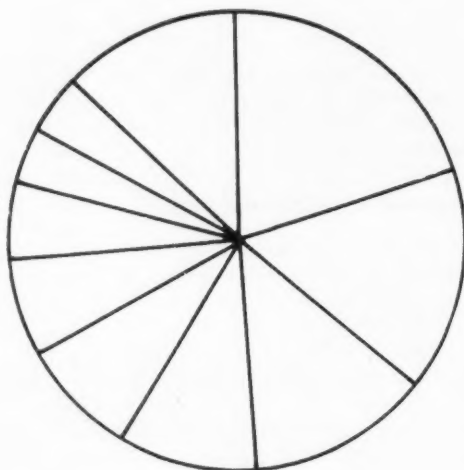
Another choice confronting the taxpayer is whether to treat research and development costs as immediately deductible expenses or to amortize them over a period of years. The immediate deduction is certainly a "bird in the hand" and may be very attractive to a company which needs this tax benefit to help finance the undertaking.

The company which can afford to spread the cost over the estimated useful life (or at least 60 months if



"The simplest method is straight-line depreciation."

"One of the other methods of depreciation is known as the declining-balance method."



"Another new method is known as the 'sum of the years' digits'."

the useful life cannot be determined) may find it best to do so. This is especially likely to be advantageous for companies whose income is expected to increase.

There is a provision in the 1954 Internal Revenue Code which allows

some proprietorships and partnerships to be taxed as if they were corporations. This choice should not be made lightly, as there is considerable uncertainty about the provision and the proprietorship or partnership desiring corporate tax treatment might

find that it would be better actually to incorporate.

Choice of fiscal year

Regulations now permit changes of fiscal year in some cases without permission of the Treasury Department. Generally it is wise to use the fiscal year which corresponds most nearly with the annual cycle of business operations, ending at the low point of receivables, inventories, and loans, instead of a calendar year. This reduces the area of possible dispute over such matters as value of inventories, and has many advantages apart from tax considerations. The change should be carefully timed, though, to avoid possible adverse effects during the changeover period.

Repairs and improvements

If you contract for repairs and improvements to your business property, be sure that these two types of work are billed separately. Should you lump them together, you may find that the entire cost has to be capitalized for future depreciation. By listing the cost of repairs as a separate item you are allowed to deduct it as an expense of the current year.

For example, you might have a furnace repaired and new radiators added. By separating the charges you can deduct the cost of the repairs in the current year, although the new radiators would be improvements subject to depreciation during their useful life.

Keeping good records

Many deductions are lost through failure to keep adequate business records. Be sure that you have good records to show you what deductible expenses you have had, and to back up your deductions in case they are questioned by the Government. This applies particularly to your out-of-pocket business expenses, such as travel and entertainment of customers, and to items which are deductible on your personal income tax return.

Good records and properly qualified professional tax assistance—at tax-filing time and throughout the year—are the keys to income tax savings. ■

LPG heats hospital for ailing thoroughbreds

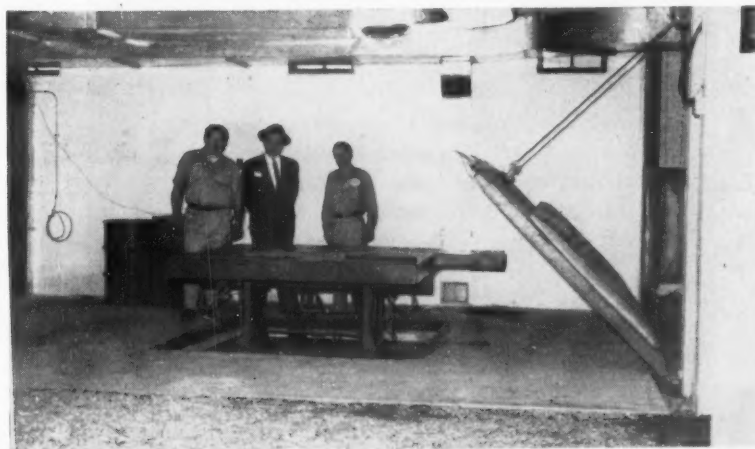
Harry J. Miller



Nothing is too good for the nag that may change your pari-mutual venture from an undeductable loss to a taxable profit. That goes for surgical attention, bonded whiskey, and draftless warm air conditioning with L. P. gas. Oh, to be a horse!



Part of the buildings of Rolling Acres Farm, one of only three hospitals in the nation for ailing horses, heats its buildings with an LPG-fired warm air system.



Well-heated is the operating room, equipped with the world's only-one-of-its-kind operating table that moves at any degree, in any direction, at the whim of the vet surgeon.

INSTALLATION of LPG as the fuel for heating one of the only three hospitals in the country devoted to the care of valuable race horses, points up the fact that America's blue ribbon-snagging pacers get almost as good treatment for their ailments as do humans.

Recognizing that the proper care and readying of prize-winning equines for the racing season is of paramount importance to owners as well as racetrack touts and the folk who flock at betting windows, the Rolling Acres farm in Tinley Park, Ill., recently installed an intricate heating and cooling system designed around two Western 250 F9A series forced air furnaces fired by LPG. Equipped with the Cross-Fire safety pilot system, each furnace has an input of 250,000 Btu, or a total of half a million Btu to cover the heat loss of the hospital section of the barn. Each unit, manufactured by International Sales Co. of San Francisco, delivers 2700 cfm.

And since the addition of double the area for the hospital and stall sections, another 250,000-Btu Western furnace is in the offing to heat the new structure.

The heating was planned so cooling could be added whenever desired and well-water is to be employed for this aspect of the installation.

Rolling Acres farm and hospital sprawls over 60 acres of lush prairie southwest of the Windy City in Tinley Park. Not only is it respected as a hospital for ailing racers, it acts as a boarding house, infirmary and an emergency veterinary clinic for thoroughbreds.

1. Easy-grip hand wheel.

2. Gall-proof manganese bronze valve stem.

3. Gasket type back seat.

4. Positive lift action (no springs).

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6. Synthetic rubber diaphragm.

7. New, tough wear-resistant nylon seat.

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3103CO
Standard ICC
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Valve.



3109H5

For combustion engine tanks—with excess flow valve.



3109H6

Similar to 3109H5 but with provision for dip tube.

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3105C0

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Cylinders—
with supple-
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plug.



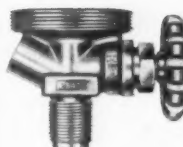
3101C0

Service Valve
—for ASME
Containers.



3103C4

Same as
3101C0 but
with added
vent valve.



2547W

Plumber's
Pot Valve—
dual POL and
tripod outlet
thread.



7140A

With special
excess flow
rating and 3/8"
NPT outlet—
for lift truck
tanks.

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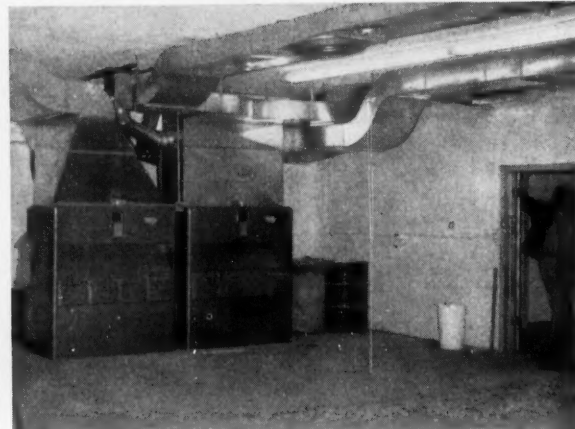
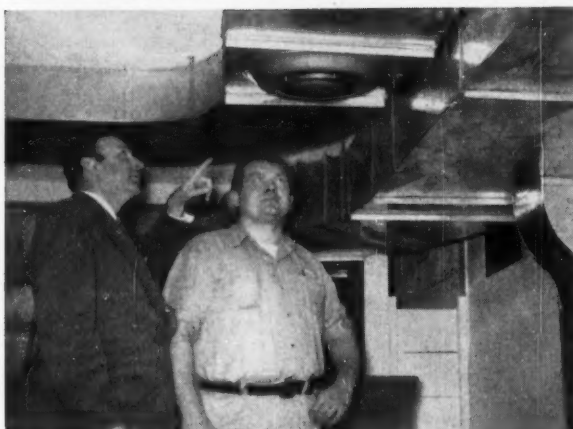
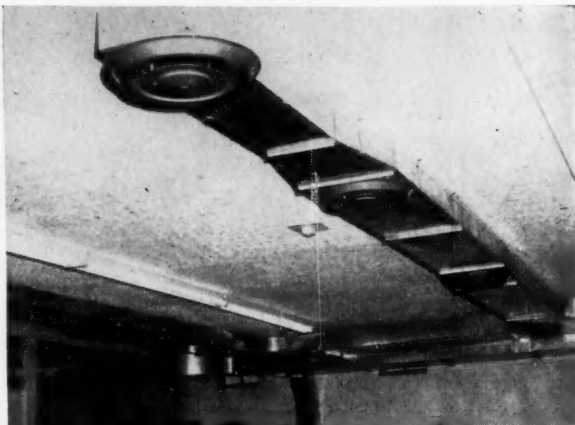
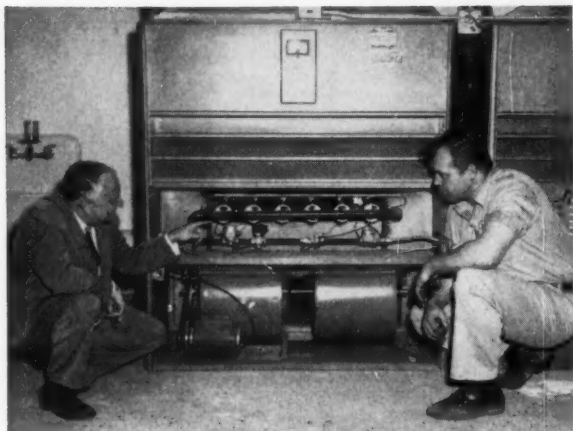
The **BASTIAN-BLESSING** Company

4205 WEST PETERSON AVENUE, CHICAGO 30, ILLINOIS



FEBRUARY, 1956

45



Two ribbon-type burners and safety pilot systems (top left) were installed. Each furnace has two burners, as pointed out to Petraitis by Paul Beekman, sales manager for the manufacturer. One of the several duct trunk lines (top right) carrying three of the air diffusers that avoid dangerous drafts to the animal undergoing surgery. Ducts carry

the LPG-heated air, and the two smokestacks (lower left) from each furnace lead to a 15-ft-high chimney whose inner liner is 12 in. by 12 in. with 2-in. rockwool insulation. At lower right are two of the three LPG-fired furnaces and one of the diffusers. Also shown is part of the complex duct network taken off at each bonnet.

Pictures courtesy of Ed Carter, *Snips Magazine*.

Since this hostelry for horses is beyond city gas mains, Owner Joe Prince selected LPG gas as the fuel for his enterprise. Mr. Prince is a prominent southside Chicago builder. He's also an avid horse lover, and his hospital is a U-shaped main barn of concrete construction containing 60 spacious stalls, with the hospital section in the right wing. This section includes a padded recovery stall, eight retaining stalls, laboratory, a standing operating stall, X-ray equipment, darkroom, and therapy equipment.

It also boasts an operating table, reputedly the only one of its kind in existence. Electrically controlled and hydraulically swiveled at any horizontal or vertical angle, when the operation is over the four-legged pa-

tient is slid off the tilted table right into his recovery stall.

Stanley Petraitis, head of Comfort-Aire Heating Co., installers, in figuring the heat loss, had to compensate for 12-in. concrete block on the outside walls and part of the floor, along with the actual ground covered with sawdust, which makes up the balance of the floor surface.

LPG-fired heating furnaces and the duct work—three tons of it—had to assure a system free of draft when a horse was undergoing an operation. Since the animal produces no body heat during the operation, a draft would cause it to go into shock.

To solve this problem, firing of the furnaces had to be kept within narrow limits, and 14 Kno-Draft round ceiling diffusers were installed to dis-

tribute the air around the room. Of these, nine were 9 in. in diameter, the other five 7 in.

In addition, stalls where convalescent horses recover from illness and surgery must have temperatures that are kept to very close tolerances. So does the room where mash is prepared and mixed with 100 proof bonded whiskey!

Seems like these race horses need artificial stimulation and trainers agree bonded liquor is a necessity. The blended variety just won't do. And since authoritative opinion is definitely on the side of frequent changes of air in buildings for farm animals being a prime need for their recovery, the LPG installation at Rolling Acres seems destined to find approval in turf circles. ■



...bad situation

A fellow doesn't know whether he's afoot or horseback if he finds himself having difficulty getting delivery of LP-Gas in cold weather. The best way to avoid getting caught short is to make arrangements with Sid Richardson Gasoline Co. for a dependable year around supply of top quality product at competitive prices. Why settle for less when we assure you

On-Time Deliveries

— winter and summer

Segregated Tank Cars

— to eliminate freeze-ups due to water

Real Security at Favorable Prices

— contract tailored to your needs

PLUS continuous co-operation because we are an independent producer having no wholesale or retail outlets competing with our customers.

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WILLIAM T. CARL
3185 DEWEY
OMAHA, NEBRASKA



Ruth Middleton (right), one of the company's home service directors, keeps busy during its cooking clinics. Here she is explaining the good points of a range to a prospect.

Claiborne beats competition with competition

Emmett Maum

Claiborne Butane beats competition with competition. The company outmaneuvers its competitors with aggressive selling of top-line appliances and exceptional after-sale service to keep appliances performing as promised.

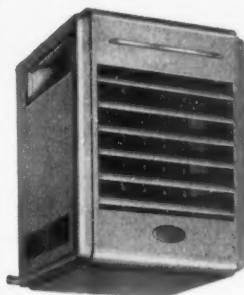
"WHY worry about competition? The cure for it is better competition, not worse competition. There are price-conscious buyers everywhere; more in some places than in others. But among them there are always plenty of prospects who put quality above price. We specialize in quality customers. We aim to get to them first with the best, and then to defend ourselves against competition by making certain that our customers get the kind of service from their appliances that we promise them. That makes a growing market for LPG."

These are the views of W. M. Rainach, president of Claiborne Butane Co. Inc., with headquarters in Homer, La., and branches in Bernice and Ringold, La., and Magnolia, Ark. Judging from the progress of this 10-year-old organization, his idea is sound. But it has taken a good deal of aggressive selling to bring the business to its present volume.

The Claiborne operation is located in a strictly rural area of northeastern Louisiana and southeastern Arkansas. The towns are small, and are principally the business centers of the farming area and homes of the oil-field personnel working in the district. Most of the company's customers live outside the towns. With this scattered population the location of the company's branches where they can handle deliveries economically is important. The longest gap between the company's branches is 50 miles. Routes and schedules are carefully worked out to hold down vehicle mileage, and prompt service to customers is insured through a short-wave system, which keeps the four offices and the drivers of all company delivery and service vehicles in constant communication.

Claiborne Butane Co. is known throughout the territory as one of the leading appliance firms. Although it

UTILITY UNIT HEATERS MAKE A LOT OF SALES-CENTS



UNIT HEATER



Any way you look at the new Utility unit heaters, you're bound to agree: they're handsome additions to a most complete line. But handsome is, as handsome ~~does~~, and these feature-loaded unit heaters are guaranteed to deliver the bonus performance you expect of Utility without any "bonus" being added to the purchase price.

To durable good looks add these features of the future, extra reasons to specify Utility: Bonderized undercoat and handsome baked enamel finish; Armor-Glas[®] protected heat exchanger to prevent corrosion; completely pre-wired at factory with Summer-Winter switch; automatic fan control that delays fan operation until unit is heated; 24-volt control system for easy installation.

Only Utility gives you the years-ahead design, superior engineering and down-to-earth price tags that sell the job... plus the guaranteed dependability that keeps it sold.

UTILITY APPLIANCE CORP.
Manufacturers of Utility Furnaces,
Air Coolers, Air Conditioners,
Water Heaters and Gaffers & Sattler
and Occidental Gas Ranges.

UTILITY APPLIANCE CORP. 4851 south alameda street, los angeles 58, california



Bob Anderson (right), sales manager of Claiborne Butane, and Phillip Fincher talk over promotion plans for appliances. The firm does an outstanding appliance selling job.

Young ladies have a look at the handsome kitchen display on the sales floor. Appliances are adjacent to the kitchen and cabinets, making a "homey" display.



is also actively engaged in carburetion and service to oil well operations, its primary merchandising activity is the sale of appliances, and on this the company depend for most of its gas volume. The appliance end of the business is organized for aggressive selling to secure new gas customers, for exceptional service to insure against losing customers to competition, and to open up additional appliance sales that lead to further gas volume.

Selling gas appliances is not something that is done when other work is slack—it is a planned operation that goes on at full speed 12 months out of the year. Full-time salesmen carry the bulk of the load. Two home service directors, Mrs. Ruth Middleton and Mrs. Anita Hollis, are on the permanent staff to conduct wash-

er clinics, freezer and cooking schools, and to visit the homes of all appliance purchasers to show them the fine points in the use of their new units.

Customers are not allowed to forget that Claiborne Butane Co. wants them to be completely satisfied with their new gas appliances. In addition to the home service director's visit, each customer receives a letter from the manager of the local branch thanking her for the business, and inviting her to call upon any of the employees for assistance whenever she feels the need for help, service or guidance in the use of her appliance. A few days after she has received the letter and the visit from the home service director, the salesman also pays a personal call "just to be sure that everything is work-

ing according to promise." These salesmen's calls lead to many sales of additional appliances, and to the securing of many new prospects among the friends and neighbors of the purchaser.

The entire organization is brought into the sales program through a system of awards for leads turned in by employees not on the regular sales staff. The employee turns in the complete information on a prospect card, and if a sale is made he receives cash compensation based on the price of the appliance. The servicemen are the most fruitful source for these leads, particularly when they are making planned calls just before the final payments on appliances purchased on time contracts. They remind the customer that her credit is already established, and that she now

THIS KIND OF LPG TALK **PAYS OFF**

*in greater sales and
customer satisfaction*

"TRUCK 2 TO DISPATCHER:
AT JOHNSON FARM—MRS. JOHN-
SON NEEDS EMERGENCY REPAIRS.
SEND SERVICEMAN."



"TRUCK 6 TO DISPATCHER:
I'M ON ROUTE 71, MILE EAST
OF 2, WITH BROKEN FAN BELT."



"DISPATCHER TO TRUCK 3:
WHEN YOU'RE FINISHED THERE,
GO 2 BLOCKS SOUTH TO 729
WINSLOW. CUSTOMER EMPTY,
AND NEEDS FUEL RIGHT AWAY."



In this highly competitive business, Degree/Day records have helped keep customers happy with regularly scheduled deliveries. But how about non-regular sales that build volume and bring in new customers . . . or the customer whose tank unexpectedly runs dry, or whose system develops a leak?

Here is where Motorola 2-way radio is giving aggressive dealers *instant* contact with the driver nearest the order and getting the gas delivered—fast!

Besides helping you win new customers with good service, Motorola radio does many other jobs. Drivers can get any on-the-spot instructions from the office . . . they can make their en-route check-ins by radio, saving time and eliminating toll calls. Radio brings help in a

hurry when a truck breaks down, cutting out-of-service time.

Most important, with 2-way radio you get more from each truck. LP Gas users report that Motorola radio boosts truck productivity 25%.

We have a Motorola radio specialist near you. Let him show you why more LP Gas dealers choose Motorola than any other. Inspect a Motorola unit . . . check its crisper voice quality, more sensitive receivers, lower battery drain, and the radio chassis that's built for rugged service and long life.

Financing is no problem . . . you can have Motorola 2-way radio on purchase, time payment, or lease (with or without equity). Under one plan, it's approved by the LPG Credit Corp. with only 10% down payment. Get the facts—write, wire or phone TODAY.

MOTOROLA

2-WAY RADIO

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.
A SUBSIDIARY OF MOTOROLA, INC.
4501 AUGUSTA BOULEVARD • CHICAGO 51, ILLINOIS
ROGERS MAJESTIC ELECTRONICS LTD., TORONTO, CANADA



Motorola consistently supplies more mobile and portable radio than all others combined.

Proof of acceptance, experience and quality.

The only COMPLETE radio communications service—

specialized engineering . . . product . . . customer

service . . . parts . . . installation . . .

maintenance . . . finance . . . lease.

"The best costs you less—specify Motorola."



"We service what we sell" is the motto of the firm. Roy Charping (left) is going over the parts needs of a customer in the company's large, well-planned shop.

has the opportunity to buy an additional appliance that she may need without red tape or heavy down payment, and with no material change in her present household budgeting. This suggestion seems to be more effective coming from the serviceman than it would be from a salesman. After all, he came there to do her a favor, and the idea of an additional appliance is just a suggestion that came up during the discussion.

Schools locate prospects

It takes a lot of prospects to keep a permanent sales staff busy. Clairborne's chief dependence for locating these prospects is the cooking and freezer schools and the home laundry clinics which the home service directors conduct. Attendance at these must be promoted—a poorly attended gathering of this kind is a wash-out, so Clairborne uses advertising quite heavily to invite the public. This is supplemented by telephone calls to known prospects, and to customers and others who are known to be community leaders or quality buyers.

The schools and clinics are generally advertised in the five newspapers published in towns of the company's service area. This seems to be the most effective means of reaching the residents of the towns and their fringe areas. Radio advertising is used at time to supplement the papers and phone calls in promoting attendance at these events, and TV is being considered.

All of the women attending the

schools or clinics are asked to fill out cards giving the vital statistics—name and address, phone number, and a list of all appliances that they own. They are also asked to list the appliances that they need. Some do, and these prospects are followed up promptly by personal visits from the salesmen. When these prospects have been worked over it is always possible to take the cards that have not mentioned any needed appliances, and by checking what appliances they have, figure out what might be the next logical purchase. If these prospects are not already making payments on previous purchases, they can frequently be interested in buying additional appliances, such as clothes dryers, extra room heaters, or anything else that does not appear on the card.

Out of these schools and clinics there is always a certain percentage of "delayed-action" prospects—those who did not list any needed appliance, but were interested in what was shown and apparently did not wish to be contacted for the sale until the purchase could be discussed and agreed to by other members of the family. Or it may have been that payments on a television or a new car would not permit immediate purchase of the appliance. There have been many cases, following cooking schools, in which these delayed-action prospects have come back to the store weeks or months later and replaced an obsolete range with the new CP model that was demonstrated during the school.

These incidents are cited by Sales

Manager Bob Anderson to substantiate his belief that only the best appliances available should be demonstrated to these groups. He points out that psychologically these gatherings are like a revival meeting—the prospect must be convinced that her present way of life is not good enough before she can be converted to a better way. And the quickest way to accomplish the conversion is to show her the greatest possible contrast between the old and the new.

"Cold turkey" calls

While every effort is made through advertising, phone calls and personal invitations to bring all possible prospects to the schools and clinics, the coverage through these means is never complete. The salesman fill in their slack periods by going down the roads ringing doorbells at every house that is not already on the customers list. Many of these people are still getting along with antiquated or inferior methods of cooking and heating water, and heating their homes. Through easy-purchase plans a good many new customers are secured through these "cold-turkey" calls.

"What we sell, we service" has been a primary operating principle of the company. This applies to all phases of the operation, appliances, carburetion equipment and everything. This requires an adequate stock of service parts and trained service representatives, and has led to the present practice of having the service staff make periodical calls on all customers to inspect the L. P. gas system and appliances to make sure that no leaks have developed and that all adjustments and controls are functioning properly. Customers have come to depend on this service. They talk over their problems with the service representatives, and frequently disclose their intention to make future appliance purchases to them rather than calling on the sales department.

The bird-dog value of these service calls is difficult to estimate, but these representatives supplement their salaries very nicely through the awards they receive on sales made as the result of their reports. And the business has grown so large that it takes eight bulk trucks to keep up with the delivery schedules. ■



Know how **UNITED** differs from most other **FUEL SUPPLIERS?**

In this one all-important fact:

UNITED represents **YOU!**

- We are not a producer, we are marketers.
- We represent the buyer of fuel, not the seller.
- We "shop the market" for LP fuel for you.
- We contract for the output of high-efficiency plants, to as-

sure you of quality product. (We are currently shipping from 24 such plants.)

- Knowing your needs and anxieties, we enforce rigid contracts and conditions on our suppliers—for YOUR protection.

Then we pass these benefits on to you.

This system gives you SEVEN built-in safety factors that assure you uninterrupted fuel supply, the year around. Our multi-hundred-tank-car fleet is more than adequate to handle any shipment, any time.

And you *pay no more* for these services than for fuel purchased without them.

You are paying for these benefits right now. And if you're on contract with United, you are getting them. Feels good, doesn't it?

UNITED PETROLEUM GAS COMPANY

4820 EXCELSIOR BLVD. • MINNEAPOLIS 16, MINN.

Sales Representatives:

R. J. BELL
1628 Thompson Ave.
LaCrosse, Wisc.

ROBERT E. BOLKCOM
8 Northwest 3rd St.
Ortonville, Minn.

C. HERB KOCH
202 Legett Bldg.
Midland, Texas

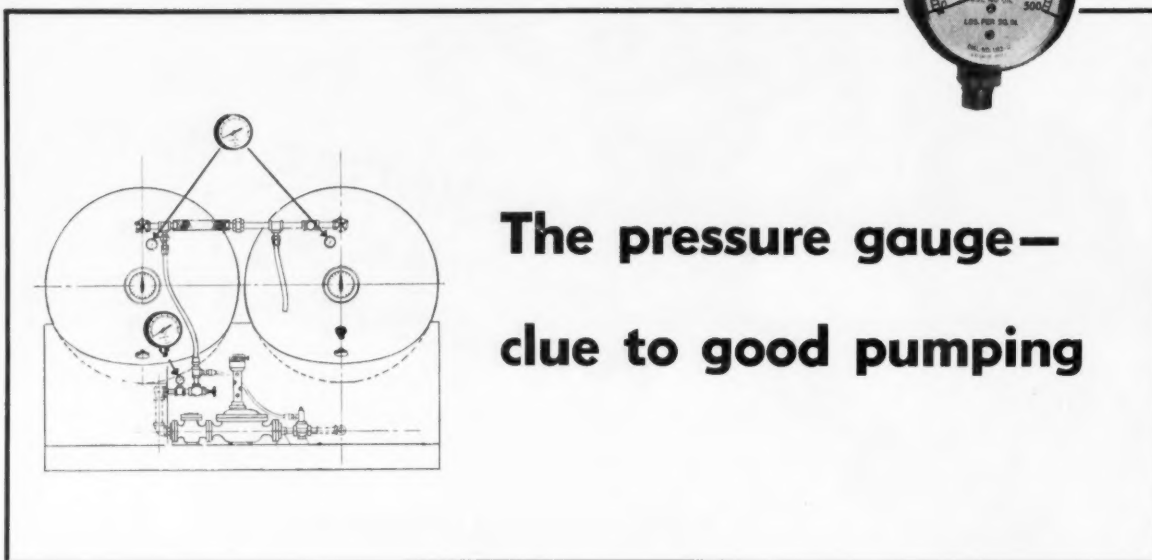
ROBERT E. HAUGEN
Hampton House, 4200 Grand Ave.
Bldg. 3—Apt. B-23, Des Moines, Iowa

G. L. STEPHENS
1011 Electric Bldg.
Houston, Texas

S. R. NAVICKAS
1 West St. Albans Rd.
Minneapolis, Minn.

W. A. STANGE
RFD No. 2, Box 337
Aurora, Ill.

F. S. VICTOR
813 McBirney Bldg.
Tulsa, Okla.



The pressure gauge— clue to good pumping

Keith Wood, Sales Engineer, Corken's Inc.

"IT'S a brand new pump and it's not delivering what it should. There must be something wrong inside."

We believe that all L. P. gas pump manufacturers have received letters and phone calls with similar complaints from customers. Sometimes the question arises as to the efficiency of a pump after a long period of service, especially after an L. P. gas dealer hears how much faster another is transferring product with the same make and model.

Transfer problems

There is nothing illogical about suspecting the pump first and no manufacturer that we know would want his customer not to inquire about transfer problems and complaints. Tracking down the real reason for a pump not working at its best isn't always easy. Sometimes a distress call has produced some almost humorous incidents—like the time an indignant customer demanded that our veteran chief field service representative, Ed Heim, personally check his Corken pump. Ed headed north in the middle of winter and after an all-night drive, battling a blizzard and icy highways, he arrived at the dealer's plant. It was bitter

cold and windy when Ed donned his coveralls and crawled underneath the truck to see "what was what." And there it was—*another make of pump!* Ed laughs about it now, but they say the spring thaw started early that year.

What's the first question to be asked when trying to find out whether the slow transfer is caused by the pump or something else? "What do the pressure gauges say? You do have a pressure gauge on the discharge side of the pump, don't you?" Very frequently the answer is "no."

Unaware

Nationwide, we find very few pumps equipped with pressure gauges, either in the bulk plant or on delivery trucks. Then, where pressure gauges are installed, bulk plant operators and bobtail drivers don't look at them; or if they do observe the pressure gauges, they are not aware of the significant information a pressure gauge can provide to help them in their business.

We would vote for the pressure gauge as being the best single guide to good pumping performance that is available in the L. P. gas industry.

It is not an expensive item (about \$2 for a good bottom-connected, 0-to-400-psi gauge with a 2½-in. dial) and not difficult to install. It's easy to operate—*just read*. Many pump manufacturers provide tapped holes on the inlet or discharge nozzles to make it easy to install gauges. It's not necessary to tear out existing piping in order to install gauges, since extra heavy tees or other fittings can be drilled and tapped ¼ in. to receive them.

What for?

Pressure gauges can wear out—just like anything else mechanical—but if a gauge does stop registering or the numerals and graduation marks become illegible, is that justification in itself not to replace a gauge? Sometimes a gauge glass only needs to be cleaned to make a gauge useful again. Moving it to a more protected place can save broken dial glasses and needles. And what's the use of installing a gauge if you have to stand on your head or break your neck in order to read it? I've heard some truck drivers say, "Heck, I can tell by the sound what the pump is doing."

On one field trip this past spring,



Pedigreed Perfection

Shot-blasted PREST-O-LITE Cylinders are marked for positive identification through a series of quality-control tests that exceed every ICC requirement. Performance in these tests is remarkably uniform—and is unsurpassed in the industry.

This "pedigreed" quality is built into every PREST-O-LITE Cylinder as a result of LINDE's 50-odd years' experience in making and using compressed gas cylinders. You can pay more, of course, but you can't buy better than the PREST-O-LITE brand.

See your local LINDE representative, or write today for full information. LINDE AIR PRODUCTS COMPANY, a Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N.Y. In Canada: Linde Air Products Company, Division of Union Carbide Canada Limited, Toronto.

The terms "Linde" and "Prest-O-Lite" are registered trade-marks of Union Carbide and Carbon Corporation.



Pressure gauge...Pumps will not last operating at extreme differentials

I received permission to accompany a bobtail truck driver on his route to see what sort of delivery rates were being achieved. When the first customer's tank was filled, the driver shut off the hose line valve, disconnected the coupling from the filler valve, and reeled in the hose, while allowing the truck pump to by-pass until he could get back into the cab to disengage the pump power take-off. Nothing wrong in that procedure, but while the pump was by-passing, it set up a loud howl of protest.

65 psi

What was happening? The by-pass valve was sticking and causing the differential pressure to reach 125 psi. On the succeeding deliveries, the pump by-passed at varying differentials—90, 115, 105, 85 psi and never below 80 psi. The manufacturer of the particular positive displacement pump on the truck specifies the maximum differential pressure should not exceed 65 psi. Certainly the pump could not last as long as it should, operating at those extreme differentials.

But that is an example of what we mean when we say, "Pressure gauges

should be read and the readings interpreted for obtaining knowledge to produce better transfer rates and longer pump life."

During another visit at the bulk plant in Idaho, one of the bobtail drivers volunteered the information that his truck's pumping system was only delivering an average of 12 to 14 GPM into domestic tanks. "What's the matter?" he asked. The pump supply system was a good one, so we could eliminate that as a source of trouble. The driver willingly started the truck pump into operation, allowing it to by-pass back into the supply tank. We all agreed the pump sounded fine—in fact, *almost too good!*

"Pumper's friend"

Well, let's see what the pressure gauges say—125 psi in the barrel—but *whoa here!* Yep, no pressure gauge on the discharge side of the pump to help us determine the by-pass setting and differential. That is when I reached into my tool kit and got my little "pumper's friend." It's not an elaborate or complicated device, but it sure comes in handy on a problem like this. What is it? Just a plain brass adapter* (1/4-in. FPT

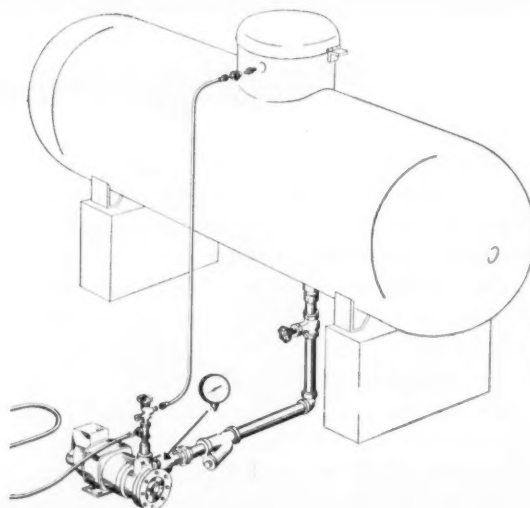
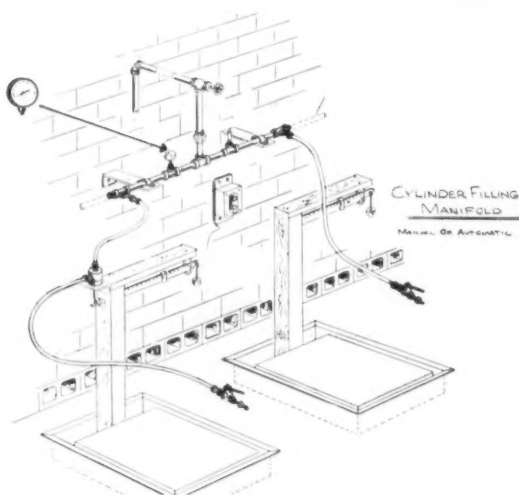
tap on one end and a 1 3/4 in.-6 Male Acme thread on the other) with a 0-to-400-psi pressure gauge installed in the 1/4-in. FPT opening.

It took just a few seconds to insert the adapter in the filler valve coupling on the end of the delivery hose, open the hose line valve, and the gauge registered 160 psi. And there was the clue to the reason for the slow pumping! The pump by-pass was set at 35 psi on a discharge system that had a pressure drop equal to about 50 psi at 21 GPM.

More profit

A second look showed us there were two automatic by-pass valves in the pumping system—one mounted integrally on the head of the pump and a separate differential relief valve properly installed in a line running back into the delivery truck barrel. What to do to remedy the situation? Reverse the relief valve on the head of the pump to block it off and then, *using a pressure gauge as a guide*, increase the spring tension on the differential relief valve until the pump by-passes at 60 psi instead of 35 psi. That is in accordance with the manufacturer's recommendations. No, the pump won't last quite as long, but the truck will be pumping off at 21 to 25 GPM, which will save time

*Catalog No.—Rego No. 5764A; Roney No. 1000; SelPac No. S-820; Fisher No. M-210.



Pressure gauges mounted on and after the pump can give the alert operator an indication of the causes for any abnormal condition affecting pumping speed.

**We've a right to be
proud**



with our
FAST-SELLING
automatic
WATER HEATERS
by



We really do have to blush with pride with more and more customers all over the country recommending our carefully engineered DWWs . . . keeps us working harder than ever to create the extra big plus features and built-in conveniences that make DWW so dependable and long lasting, so sure to provide the trouble-free on-the-job service that really counts. That's why we know you'll like DWWs, too, and why you'll have all the sales assurance in the world that these two will keep on growing BIG together — profits and the wonderful fast-selling Automatic Water Heaters by D W Whitehead.

DWW'S *Big* PLUS FEATURES

- Low operating cost
- Quick, abundant hot water
- 100% automatic safety pilot
- Non-clogging burners
- Two inches heavy Fiberglas insulation prevents heat loss
- Dust-free base
- Adjustable thermostat easily set for any temperature
- Built-in lint tank
- Gleaming white enamel casing
- Advanced design with latest scientific improvements
- Precision engineering

liberal 10-year guarantee

nationally advertised

D.W. WHITEHEAD



D. W. WHITEHEAD MFG. CORP. • 1220 Walnut Ave., Trenton 9, N. J.

**You've a right to make
profits**



more selling points

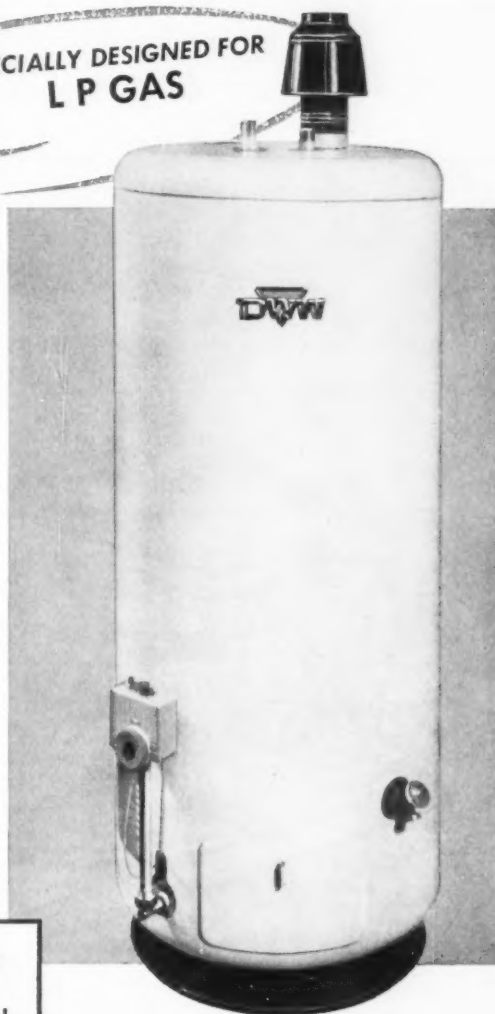
D W Whitehead Automatic Water Heaters are available in tank models featuring an exclusive one-piece glass lining or double extra-heavy galvanized tank.

**GET IN ON D W WHITEHEAD'S PROFIT-
PACKED WATER HEATER RENTAL PLAN.**

WRITE TODAY FOR FULL DETAILS!



**ESPECIALLY DESIGNED FOR
L P GAS**



Pressure gauge... A highly restrictive discharge system can cause relatively high differentials

and make many more dollars profit for its owner.

If your liquid pump produces its rated differential pressure when operating through the by-pass to indicate the pump is still efficient, but still doesn't deliver many GPM, we suggest that you look to the piping system—both on the inlet and discharge sides of the pump. The trouble may be caused by an inadequate vapor return system, which produces unnecessary back pressure in the receiving vessel with the added pressure showing up as increased differential on the pressure gauges. Remember, too, that when you operate a liquid pump and see the pressure increasing in the receiving tank, there is a corresponding pressure drop in the supply tank that produces boiling in the liquid, vapor locking, and pump starvation.

Differential

When pressure gauges in a pumping system indicate a relatively high differential, it is more probable that slower transfer rates are being achieved, not faster. A highly restrictive discharge system can cause such

a condition. Some delivery trucks, with 100 feet of $\frac{3}{4}$ in. liquid hose, heavy spring settings on meter back-pressure valves, and other items in the pump discharge system, can only unload at 21 GPM into a domestic tank with the pump differential at its maximum of 65 psi as limited by the by-pass valve. Compare this with 40 GPM produced with only 40 psi differential on some of the newer delivery trucks, or some that have been refitted. Which truck will make the most money for its owner? That's easy to answer, isn't it?

Here are a few more examples of what pressure gauges can tell a pump operator:

1. When to open the vapor return valve or hook up a vapor return line.
2. When vapor locking occurs.
3. What product you are pumping.
4. When differential relief valve springs weaken and require adjustment.
5. If the proper valves are open or closed.
6. What is the efficiency of a compressor—compression and valves.
7. When tanks are empty or have product in them.

8. When to stop vapor recovery with a compressor at the most economical point.

9. When to start a liquid pump on a tank car unloading system.

10. How to adjust the discharge system on some types of liquid pumps to gain maximum efficiency and GPM when unloading tank cars or transports.

Rely on gauges

There are many more uses for pressure gauges and we especially recommend that new men in your LPG distributorship organization learn to rely on pressure gauges instead of their instincts. And you bulk plant owners and managers: why don't you take a look at your pressure gauges on stationary pumps and compressors, in tanks, or on delivery trucks today? Call on your favorite equipment house salesman to help make the inspection and get those replacement gauges or additional ones required on order and working for you.

Why not make up a "Pumper's Friend" of your own—like mine? It only costs about \$4. Then go out and check your pumps and by-pass settings. We think you will be in for some surprises, but the knowledge gained can help you make your pumps last longer, pump faster, and make more profit for you. ■



By J. Arthur Thompson

What a whopper of a fish story!

PROPANE PETE was kinda discouraged. He'd wandered a long ways from his home grounds and found himself way up in Ohio. He was discouraged because he couldn't get folks to stop and listen to his story about all the fine things that L. P. gas would do.

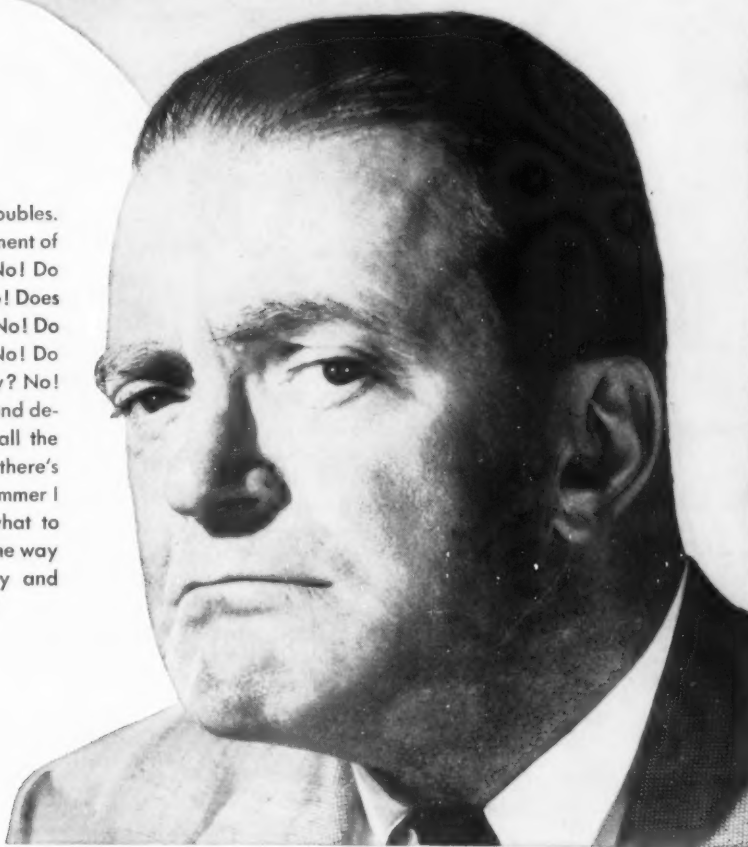
He was right close to Lake Erie and decided he might as well go fishin'. Now Propane Pete, like a lot of other dry landers, was mighty fascinated with fish. So he goes out to the lake and rents a row boat.

● PROPANE PETE EPISODE NO. 7

"I'M NOT LOOKING FOR TROUBLE, I'VE GOT IT!"

(This man is **NOT** a Cities Service Distributor)

"Buddy, you should have my troubles. I put in an order for a new shipment of LP-Gas. Do I get it on time? No! Do I get the amount I ordered? No! Does it meet my quality standards? No! Do my customers get it on time? No! Do they take the matter laughingly? No! And then summer rolls around and demand slackens and I can get all the LP-Gas I want . . . except that there's no place to put it because in summer I have so much I don't know what to do with it. If only there were some way to get on-time winter delivery and balance the seasonal load . . ."



This man needs Cities Service as a supplier. No late shipments with Cities Service! The distributor receives only the highest quality LP-Gas available . . . produced by Cities Service, stored by Cities Service, and delivered by Cities Service in any quantity, anywhere, any time. And to help balance the load, Cities Service provides expert carburetorial assistance . . . assistance that's resulting in the conversion of more and more farm and industrial engines to LPG. If this sounds like the kind of cooperation you're looking for, here's an impressive list of advantages that ought to convince you further . . . enough, we hope, to contact one of the Cities Service offices listed below.

QUALITY Completely moisture-free . . . trouble free. Cities Service LP-Gas exceeds NGAA specifications, exceeds sales expectations!

SUPPLY Multiple plants and vast underground storage facilities assure uninterrupted year-round supply.

TRANSPORTATION Tank car and trucking fleets for rapid, quantity delivery.

SERVICES Management, engineering, carburetion, and operational know-how, plus expert promotional assistance. There are Cities Service representatives in every state to help distributors with their problems.

NO SUPPLIER COMPETITION Remember—Cities Service operates no retail outlets, does not compete with distributors. Get the whole, profitable story from one of the offices below.

SERVICE! . . . Part of our name, part of our business.

CITIES SERVICE
QUALITY PETROLEUM PRODUCTS

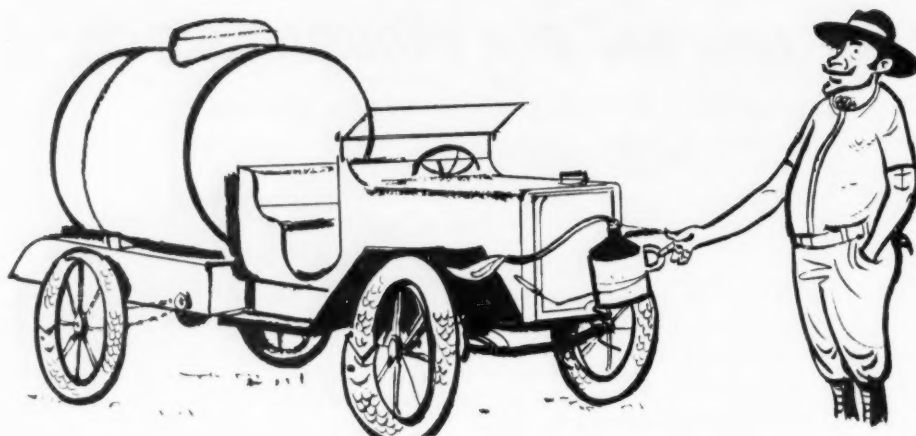
406 W. 34th Street
Kansas City, Missouri

20 N. Wacker Drive
Chicago, Illinois

500 Robert Street
St. Paul, Minnesota

6611 Euclid Avenue
Cleveland, Ohio





First day he didn't get a nibble, although everybody else seemed to be doin' all right. Second day it was just about the same, until around about sundown, a couple of young fellows took pity on him and explained that you had to use bait to catch fish. They sold Pete a little bait and showed him how to really fish in Lake Erie.

Pete went out again next day and pretty soon he got the hang of it. He started pullin' in fish. When he got his boat full, he pulled back to shore and had himself a fish fry. He stuffed himself so full of fish that he darned near sprouted fins.

It stormed for a couple of days so Pete didn't go out. He got an idea for a portable gas rig and spent the time riggin' up one. He took his red eye jug which was empty and shoved a piece of tubing through the cork and wired the cork in.

Then he mended an old regulator and fixed a burner out of an old rusty tomato can. He put a light charge of propane into the bottle out of his truck, old Beepee, and found he had a perfect piece of camping-out equipment, one he could carry in a boat.

The following day was fine and Pete decided he was goin' out where the big fish were.

He got pretty well out in the lake and began to fish. Sure enough, he hooked a big one. It was so darned big that Pete couldn't get it in the boat. So he just tied it on behind and went on fishing. He kept catchin' fish of various kinds and sizes. He cooked one on his little improvised stove and figured he was set for a couple of days uninterrupted fishin'.

Pretty soon Pete looked around. He was nearly out of sight of land. That big fish had been towing him right out towards the middle of the lake. The wind began to blow, but Pete kept fishin'. The fish kept pullin' him toward the middle of the lake and the wind kept shovin' him back towards shore.

Pete caught a couple of more big ones that he couldn't get in the boat and he tied them alongside, too. The storm kept gettin' worse. Finally Pete caught a real whopper, bigger than the others, and decided he had enough. His boat was full and he had four that were too big to get into the boat.

After considerable trouble he got all four of them fish pullin' together and headed for shore. With the wind be-

hind him, he darned near flew over the water. But when he got near shore, big trouble loomed.

Those fish didn't have any brakes and the waves were pilin' up on land, mighty rough and high. Pete thought fast. He grabbed his red eye jug that had the propane in it and turned the propane on the waves just as he hit shore. It froze the waves instantly and he just slid up and over to a safe landing just like he was on a toboggan.

It took Pete quite a little bit to get back his land legs after all the tossin' around he'd had. But he finally managed to stand up and get his truck Beepee over by the boat. He'd had enough risks on water and wanted to get back to his own country.

He loaded all of the fish on top of the Beepee and took off for the Southwest.

He was just passin' through a little village when, Bang! went one of his tires. Bang! went a second one. Bang! Bang! and old Beepee was down on her rims.

Pete got out and looked the situation over. There sure was no fixin' those tires. He had to have new ones. Then he made up his mind. As he turned away from the truck here was the two young fellows that had sold him the bait out on Lake Erie and had showed him how to fish.

"What town's this?" Pete asked them.

"Deshler," was the reply, "Deshler, Ohio."

Pete made a bargain with them. He'd give 'em all of the fish except the four big ones if they'd help him. They was agreeable providing he showed them what to do.

Pete had 'em unload the truck and skin the four biggest fish. Meantime, he took the air valves out of the old tires and then rigged himself a propane torch. Then he took those big fish skins and cut and fashioned them into tires for the truck. He welded them tight and welded in the air valves.

He put just a little liquid propane in each tire which warmed up and inflated them just right without any pumping up.

The young fellows that watched him there in Deshler were the Clayton Brothers. Max and John Clayton were so convinced by what they'd seen that they got into the propane business as soon as they could.

The truck tires worked fine except that in hot weather they did smell quite a bit. But then Propane Pete wasn't finicky. ■

Watch for EPISODE NO. 8 • Hot foot for a gila monster

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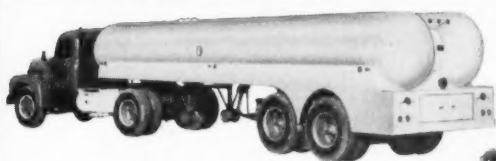
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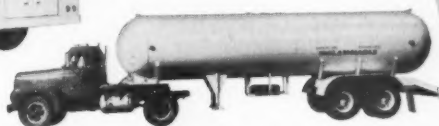


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TRANSPORT SECTION...



No. 200 LPG and anhydrous ammonia twin barrel transport tanks.



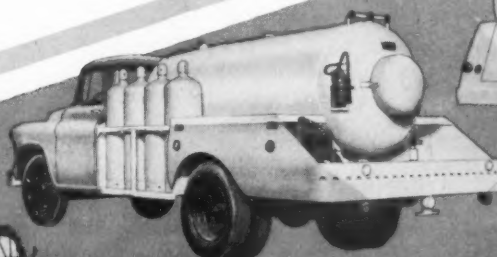
No. 205 Standard LPG and anhydrous ammonia single barrel transport tanks.



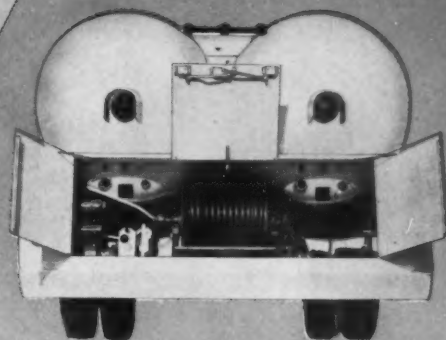
No. 210 Master Max with a step-down tank. Lowers center of gravity, increases payload and reduces wind resistance.



Oil & Gas Special — This unit has a built-in compartment on each side to carry packaged petroleum products . . . large enough for a drum of oil.



Southern Combination — 900 gallon LPG delivery truck with facilities for both bulk and bottle deliveries. A new idea.



THE PATENT PENDING FEATURES of the Time Saver — All Time Saver truck tanks are equipped as a single unit on the rear of the tanks. No plumbing to change or get out of order. Simple, efficient and rugged.



Southern Special — 1400-1700 gallons, open rear end and high fittings for regions where ice and snow is uncommon.



Northern Special — 1400-1700 gallons, closed rear end and high fittings for the land of ice and snow.



Southern Express — 1800-2200 gallons, open rear end and low fittings for bulk deliveries down South.



Northern Express — 1800-2200 gallons, low fittings and a closed rear end for protection against ice and snow.



"Do-It-Yourself" Kit — For those who prefer to mount their own.



Maple syrup producer cuts costs by cooking with LPG



A bottle-gas-heated evaporating pan and a plastic pipeline two miles long from his 400 maple trees have replaced the wooden sap buckets

and wood-fired stove for Chester A. Wilson, shown here with his home-designed syrup maker.

FOR 23 years Chester A. Wilson, of Rock Springs, Wis., cooked the sap from his 600 producing maple trees into syrup over a wood fire. Somebody had to cut and haul that wood, and it was a tremendous job. Mr. Wilson makes as much as 300 gallons of maple syrup each year, each gallon of which is concentrated down from 40 gallons of sap. It required approximately 150 man days to cut and bring in that wood, after which someone had to feed it to the fire under the evaporating pan, and

hope to keep the sap boiling. Then there was the problem of removing the ashes without allowing them to blow into the vat.

Two years ago Mr. Wilson gave up the unequal struggle against the scarcity and high cost of farm labor, and converted his maple syrup operation to bottle gas. Twelve cylinders connected in two banks of six each supply the fuel for the seven 30,000 Btu burners under the 32 by 91 in. vat. The burners are of the drilled tube type, each equipped

with a constantly burning pilot, so complete control over the heat may be maintained at all times. When all burners are on maximum opening they produce enough heat to warm two average homes. Fuel is 10 lbs. per hour at maximum heat.

The cost of the L. P. gas is about the same as the former cost of handling the wood in the evaporating plant—and this does not include the cost of the wood. This is a substantial saving, and it has brought the fuel cost down to just slightly over

PERFORMANCE VERIFIED / **by acid test**

Even before a Powell Valve is made, it must pass the acid test. For quality control of Powell Valves begins not with manufacture—but with the very materials which go into Powell Valves.

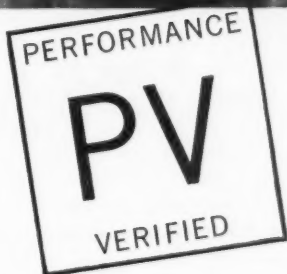
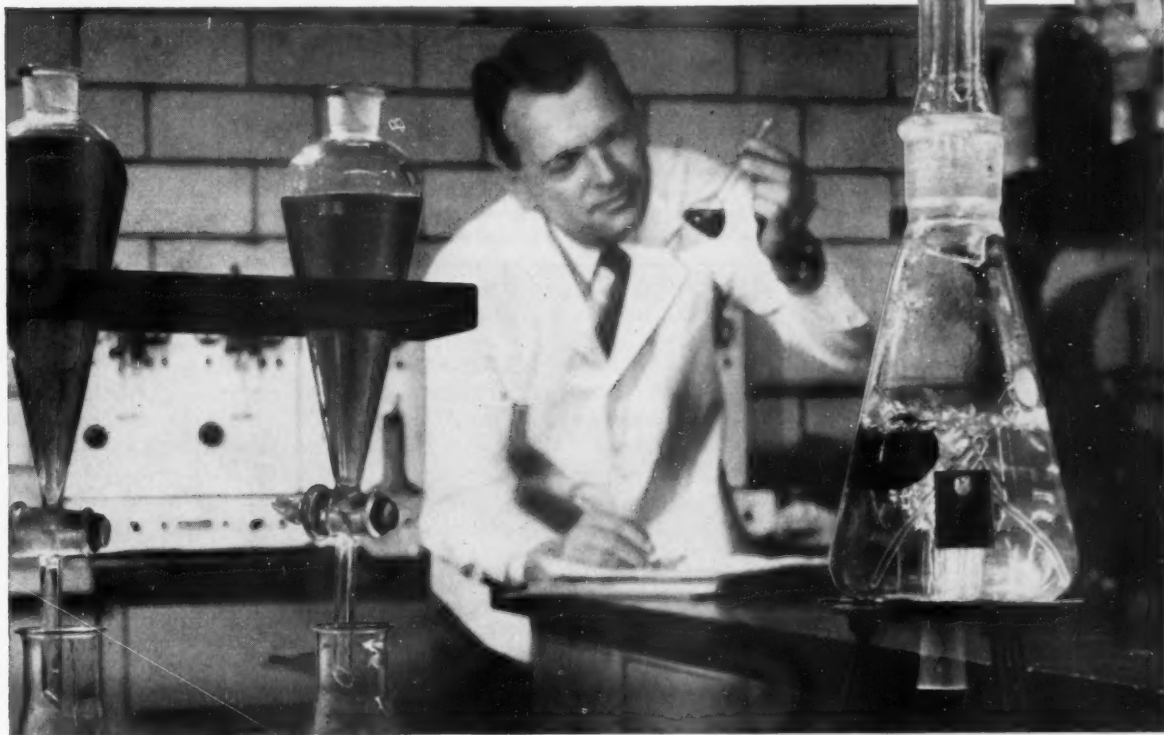
Constant laboratory control is one of the many ways we make certain that Powell Valves will give dependable flow control. Another is the final step of manufacture of these precision-built valves: *every Powell*

Valve is subjected to an actual line test.

Because of Powell's painstaking quality control, valve repair is cut to the minimum and plant shut down through valve failure is substantially reduced. Records of performance the world over prove it.

Consult your Powell Valve distributor. If none is near you, we'll be pleased to tell you about our **COMPLETE quality line** which has **PERFORMANCE VERIFIED**.

The Wm. Powell Company, Cincinnati 22, Ohio . . . 110th YEAR



These valves are Underwriter approved.

FIG. 8150 (Sectional)—Bronze "L.P.G." Globe Valve For 400 Pounds W.O.G.



FIG. 8158—Bronze "L.P.G." Horizontal Lift Check Valve For 400 Pounds W.O.G.



FIG. 8151—Bronze "L.P.G." Angle Valve For 400 Pounds W.O.G.



POWELL VALVES

BRONZE, IRON, STEEL AND CORROSION RESISTANT VALVES.



Chester A. Wilson (kneeling) and Dalton A. Fleege, Sauk County agricultural agent, look at small plastic tubing tap which carries sap from

the tree to the larger tube near their feet. The tube is connected to carry sap from the trees downhill to the evaporating unit.

\$1 per gal. of syrup. Mr. Wilson is now working on the improvement of draft conditions around the cooker in an effort to concentrate the heat still further and bring the cost under \$1 per gal.

In years gone by Mr. Wilson collected his sap in the traditional way, hanging small wooden buckets on each tree and collecting the sap at intervals into large cans which were trucked to the cooker. This method has recently been replaced by a gravity system employing nearly two miles of plastic tubing. Gathering lines are laid in the maple orchard late in the fall, and connected to a mainline from the orchard to the plant, which is located near his home. $\frac{3}{8}$ in. plastic tubes connect the trees with the gathering lines, and the sap flows automatically to the reservoir at the cooker. From here it can be fed as needed into the pre-heater, which is a wash boiler equipped with a 2000 watt electric immersion heater. This brings the temperature up to 110°, which is high enough to transfer the charge into the evaporating pan without stopping the boil-

ing. This system enables Mr. Wilson to spend most of his time at the evaporator, making only infrequent trips into the orchard to see that the tubes are still properly connected to the tap holes in the trees. The piping system is disassembled and stored for the summer.

When the sap appears to have been reduced to proper consistency for marketing as syrup, Mr. Wilson takes a sample to his wife, who tastes it to determine quality, and tests it in her own way to find out if the cooking is complete. The product is all sold locally, and brings \$6 per gal., or \$1.50 per qt. It has never been necessary to market the product through wholesale channels, as the entire output is taken by retail customers, mostly within a 50-mile radius of the farm. It is packed in cans ranging from 1 qt. to 5 gal. The largest part of the crop goes out in quarts.

It is reported that there are approximately 3000 farms in Wisconsin where maple sap is produced. Some of these operations are small, being carried on by farmers to produce a little syrup for themselves and their friends. There are numerous farmers, however, who make a profitable business out of making syrup and

maple sugar. Some of these farms tap as high as 10,000 trees. It is estimated that the state's annual crop of maple sap runs between 80,000 and 100,000 gals. This production comes in March and April, just as the winter househeating season is beginning to taper off. Conversion of these sap cookers to L. P. gas represents a substantial market for the local dealers.

Conversion of the cookers is simple, using tube-type burners already in production in stock lengths. Complete syrup cookers may also be obtained from the burner manufacturers. And there is also the possibility of increasing the merchandise sale by supplying plastic tubing for the gathering systems. This may be obtained from the plastics supply houses in almost every major city.

Authorities point out that production of maple syrup and sugar does not reach as high volume as would be possible. Many sugar orchards are no longer in production because of the high labor costs of the old method of collection of sap and boiling down over a wood fire. As with almost every other agricultural pursuit, modern mechanization and more efficient fuels offer greater opportunities for profit. ■

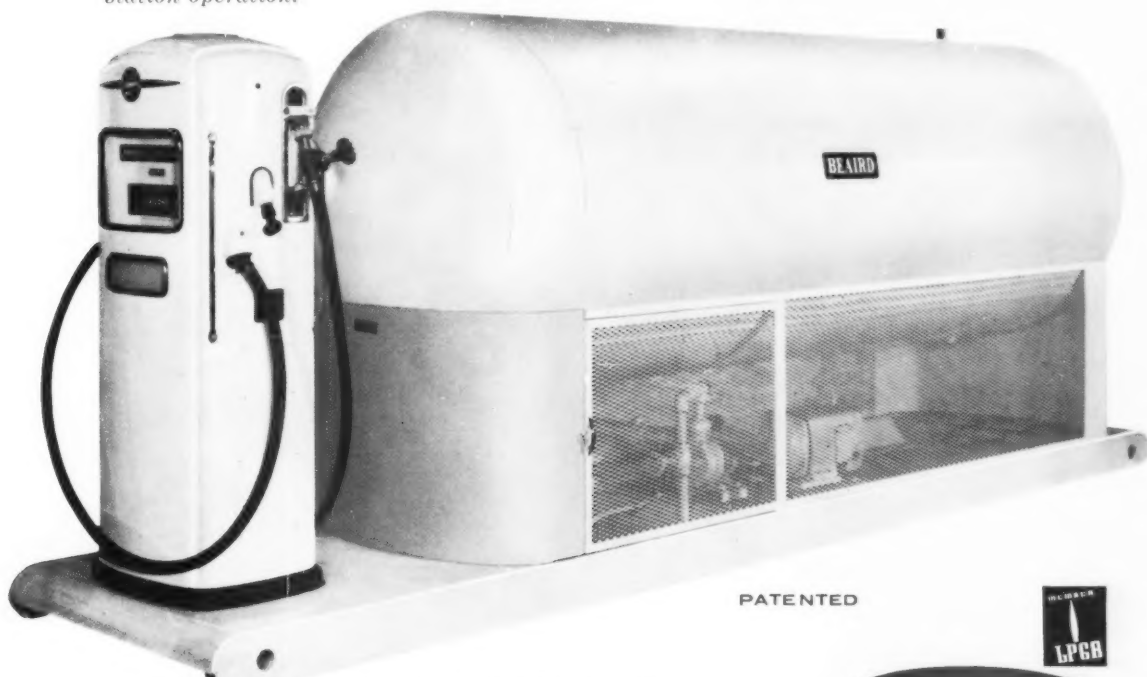


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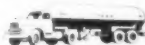
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Anhydrous Ammonia



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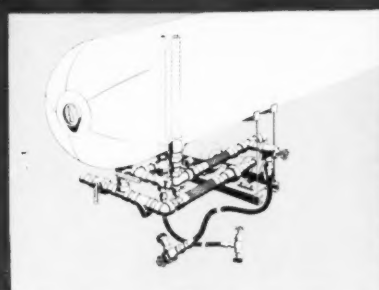
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Transports



Filling Station



Shreveport, Louisiana
 Stockton, California



The mechanics



of the modern

clothes dryer...

John W. Christensen, Manager, Major Appliances, Montgomery Ward & Co.

THE automatic clothes dryer—whether gas or electric—completed the job of making the home laundry automatic. Just as the automatic washer made batch washing possible, so did the dryer make a batch operation out of the old hang-them-on-the-line-piece-by-piece method.

How does it do it?

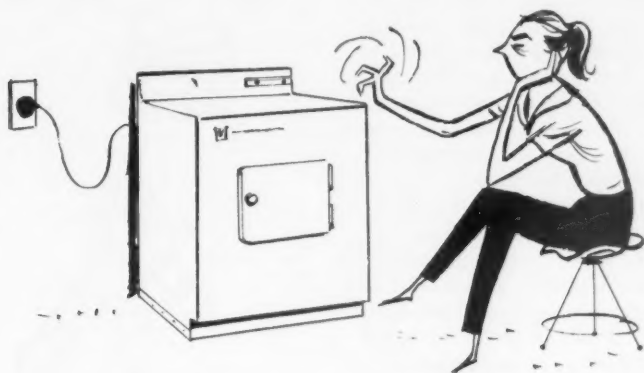
Basically, the mechanism that makes batch drying possible is very simple. It consists of a revolving drum to tumble the clothes, a source of heat, and a system of moving the heated air through the clothes.

easily to 110 volts where the house is not wired for 220-240-volt service. When an electric dryer is run on an ordinary 110-120-volt house wiring circuit, nothing else should be plugged into the same line or the fuse will probably blow (as it should, to protect the line from overheating).

It takes $2\frac{1}{2}$ to 3 times as long to dry clothes at the lower voltage as compared with 220-240, but with 110-120 there may be a slight saving in the amount of electricity used.

The gas units operate on L. P. gas, natural gas, or manufactured gas.

... They consist of a source of heat, a system of moving the heated air and a revolving drum to tumble the clothes.



Much engineering thought has gone into combining these three elements into an integrated, easy-to-use appliance.

Let's look first at the *source of heat*—usually either electricity, city gas, or L. P. gas. Which to buy depends on which fuel you are currently using for cooking, operating costs, and installation costs.

Most electric dryers are made to run on a 220-240-volt service. However, some of them may be converted

Usually it is necessary to specify the kind of gas available in order to be sure of proper operation. When users of gas dryers move, they should check with their gas company to determine if any changes need to be made in their dryers. The consumption of gas varies from 13,000 to 20,000 Btu in various makes. The burner location may vary also. Prospective buyers can choose between manually lit dryers and automatic ignition dryers. The automatic ignition may be

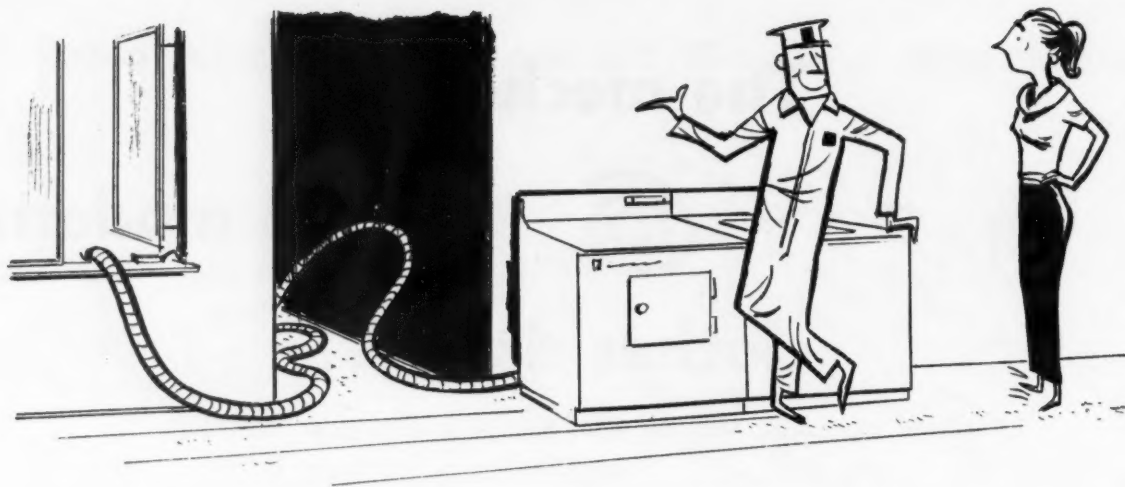
either the spark type or the heater coil type.

In general construction and appearance most dryers match a companion automatic washer. This helped greatly in furthering kitchen and first floor installations.

Dryer controls are usually at rear—away from children. However, some units with front controls can be put in smaller spaces, under stairs, etc.

There are no top-loading tumbler dryers. Door openings are generally right hand, but some units can be installed with door opening to the left, others drop down to provide a clothes rest. Some doors swing a full half circle or 180°, others 90°. While door openings may vary in size, the actual capacity of nearly all models is standard at 9 lb of dry clothes or 18 lb of wet clothes. In other words, a load for the washer is a load for the dryer. In most deluxe models the door also operates a safety stop switch.

The tumbler drum itself is made in a number of ways. It may be baked



enamel, aluminum finish, zinc-coated, resin, or porcelain. It may be solid metal or have perforated or screen openings in the drum itself or on one or both ends.

The dryer interior may be flood lighted or it may have a germicidal light, or both.

Cabinet insulation varies by manufacturer also. About one-half the current models depend on air circulation to keep the cabinet cool while the other half use Fiberglas, spun glass or aluminum foil.

Perhaps the most significant differences are in operating principles. Some depend on tumbling the clothes in a pool of gently circulating warm air—the “carrier current” principle. Some use high velocity air movement, blowing air through the dryer at up to 150 cfm. Others operate with a suction fan to draw heated air through the clothes. One operates in a sealed system. Despite these differences, all leading makes do a marvelous job of removing moisture, fluffing clothes, and conditioning them.

All dryers exhaust lint and moisture. However, it should be borne in mind that they do not *create* lint, they only remove it. This exhaust can cause trouble—as much as 1 gal. of water per hour is extracted from clothes and the excessive humidity created as a result can damage woodwork, foundations, and wallpaper—as well as being uncomfortable to work in. An installation in a roomy, well-ventilated warm area is usually able to handle the moisture problem without venting the exhaust outside.

However, most installations today are being vented. With today's dryers it is possible to run venting pipes as much as 25 ft long—proportionately less if there are bends or turns in the piping. Modern vent kits are self-sealing and close automatically to prevent the entry of rodents or dirt into the house through the vent.

Vent arrangements differ. Some are at the top of the dryer, some at the bottom. Most are designed to permit venting from either side and either up or down. Some can be mounted flush against the wall, others cannot. Since the vent arrangement not only contributes to the efficiency and convenience of the dryer, as well as being a major factor in making a neat installation, it is important to check such arrangements carefully when buying.

All dryers provide some means of capturing and disposing of lint to prevent it from settling in the laundry room or clogging the vent pipes. Usually a screen or perforated metal tray is used. It may be at the top or bottom front of the dryer depending on the principle used. Other dryers use a water spray and drain connection to flush the lint away. A system of this type does not need a vent but it does need water connections and a drain. Usually these are conveniently accessible in the laundry so that requirement does not create a problem. However, the cost of the drain water would raise the operating cost of such a dryer.

The necessary controls of the drying operation may be divided into three basic groups: the “workers,”

the “silent watchmen,” and the “master mind” controls. The *workers* are the operating parts such as the motor, on-off switch if any, and on the gas dryers, the solenoid valve coils, the ignitor coil, and the floor and germicidal lamps.



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The *silent watchmen* are very important. The first safeguard is the Underwriters label and the American Gas Association seal of approval—all well-known brands are tested and approved by these groups. In addition, there are other mechanical and electrical safeguards against possible faulty circumstances.

The *motor fuse* guards against motor overload or a stalled motor. If necessary it stops the motor and turns off the source of heat.

The *reset protectomatic* guards against overheating (because of faulty thermostats, solenoids or excessive back pressures) and if necessary, it automatically stops the motor and shuts off the heat.

A *thermo disc* is often used to guard against air flow obstructions, sticking solenoid valves and/or improperly positioned lint screens. If necessary, it automatically turns off the heat.

The *motor throw-out switch* prevents heater operation without motor operation. It will not permit the main gas burner to ignite until the motor has attained the proper rate of operating speed.

The *master mind* controls do the thinking for the dryer. They are the source of the flexibility and control which today's homemaker prizes so much.

The *door switch* stops the motor, drum and main burner when the dryer door is open, starts them again when the door is closed. It also operates the drum flood lamp and germicidal lamp.

On gas dryers there are two other marvelous controls: (1) The *automatic pilot switch* opens the main burner solenoid valve, permitting gas to flow to the main burner after the pilot is operating. A flame on one side of the pilot burner heats the mercury bulb and the heat vaporizes the mercury. The pressure of the hot mercury expands the diaphragm in the automatic pilot switch, completes the electrical circuit to the main burner solenoid coil, which, in turn, opens the solenoid and allows gas to flow to the main burner. (2) The *pilot warp switch* minds the pilot light flame. In case the pilot orifice is plugged or the pilot gas is not ignited within four minutes the pilot warp switch will automatically shut off the ignitor coil and close the pilot solenoid.

However, the controls of greatest interest are those that determine drying time, heat, and method of operation.

The majority of dryers use a timed drying cycle. The cycle may be as long as 180 minutes in some dryers or as short as 60 or 85 minutes. These are maximum times—the average load dries in 35 to 45 minutes and the longer times are used only with lower heat or unusual materials like a washed feather pillow. It should be recognized that timing is the great problem of drying. Everyone has to determine an individual time schedule based on the heat source, and the efficiency of the companion washers, wringer or spinner. Obviously, the most efficient extractor results in the shortest drying time. On the other



hand, it usually creates more wrinkles. But the job of the dryer is not only to dry clothes but to fluff out wrinkles so good results are available either way. In any event, do not over dry—that is what creates wrinkles and harshness. It is the cardinal sin of drying operation. Usually it is easy to determine the proper timing after a few trials and then the user can gain another tremendous advantage by "damp-drying" the wash so it is ready for ironing. One manufacturer has a built-in sprinkling arrangement for dampening clothes.

Some makes use a humidistat *mastermind* control instead of a timer. This system depends on the principle that heat builds up in a dryer as the clothes get dryer and dryer. Thus a thermostat shut-off at the predetermined heat level stops the dryer where the clothes are dry. A second type of mastermind control determines the heat or temperature of the dryer. Certain dryers operate at a

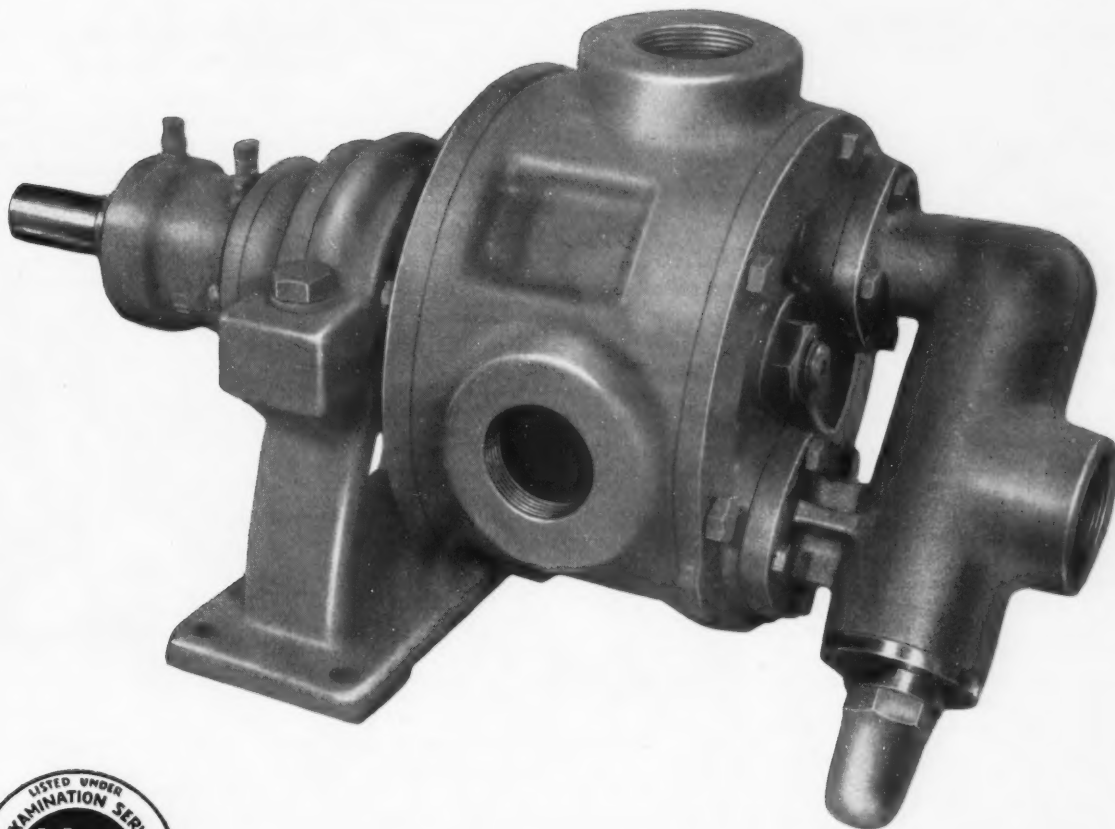
fixed heat—usually about 140°. Others have a choice of three temperatures: low, medium, and high. Generally these settings are for 135°, 160°, and 185° to 200°. This control has greatly increased the usefulness of the dryer—enabling it to provide ideal "drying weather" for any fabric or load. Some dryers go a step further. They offer users the choice of several drying methods. For instance, with air circulation and no heat or with no heat or tumbling—for lamp shades, wet shoes, etc.

Dryers are also being successfully combined with automatic washers into one complete laundry unit. So far this has not resulted in any cost saving, but it does save space and it eliminates the burdensome chore of lifting wet clothes out of the washer and the dryer. It is growing in popularity rapidly.

Another recent development has been the emphasis on speed of drying. Usually the dryer will keep pace with an automatic washer, but a conventional washer gets a little ahead. Apparently the quality of fast-dried clothes is proving to be quite satisfactory.

In summary, it might be pointed out that automatic drying has finally arrived. Dryer sales are setting new records. Saturation is up to 10%. People now discuss "which" dryer to buy instead of "whether" they shall get a dryer. This, instead of making the manufacturers' selling job easier, makes it doubly difficult because each must develop extra-values or use-values in order to win the homemaker over to his product. In fact, it could safely be stated that the success of one dryer against another is no longer decided on the merits of its basic drying ability—in that respect it must be on a par with all others or it cannot compete at all—instead its success is being determined by the extra-values, or use-values, appearance-wise and convenience-wise, which differentiate it from others. In this type of competition, the homemaker gets the greatest value for her dollar and—dollar for dollar—a dryer is today her best value from the standpoint of the help it gives her in managing her most difficult chore—drying the wash. ■

Adapted from a talk presented before the Ninth National Home Laundry Conference in San Francisco Nov. 3, 1955.



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news



Home economics students hear LPG discussion

Students from the home economics department of Morehead (Ky.) State College were addressed recently by Frances L. Holliday, secretary of the Kentucky L. P. Gas Association.

The newly equipped food and equipment laboratory at the college includes a Magic Chef gas range, which was used to demonstrate modern cooking practices.

Miss Holliday discussed L. P. gas and the appliances in which it is used in the home. The state association presented copies of a new cook book, "Cooking With Gas," to the home-ec department.



Miss Shields explains how the "thermal eye" temperature control operates in automatic top-of-the-range cooking to more than 50 home economics specialists who attended her demonstration at a meeting of the New Jersey Home Economics Association.

Republic Heater division celebrates 25th anniversary



M. J. Stevens

Republic Heater division of Odin Stove Manufacturing Co. is celebrating its 25th anniversary with the introduction of two new appliances and a revision of its warranty program.

A new Twin Dual (four burner) 40-gal. Booster, extra high recovery water heater was made available the first of the year. In addition, the company is market-

ing a new table-top style gas incinerator under the name of "Decinerator." A 15-year warranty is now provided for all of the company's "top of the line" models.

In reviewing the company's operations for the past few years, Milton J. Stevens, president of Republic, stated that the company's policy has been to manufacture gas appliances only, with every water heater model equipped at the factory with burner and control equipment for either natural or L. P. gas as specified and at no extra charge for the LPG equipment.

Republic Heater Co. was acquired last year by Odin Stove Manufacturing Co., Erie, Pa.

Top-of-the-range show prepares holiday meal

A complete holiday meal — everything from chicken fricassee to crepe suzettes—was prepared in a recent demonstration of thermostatically controlled, top-of-the-range cooking before the New Jersey Home Economics Association.

Rhea Shields, home economics director for Robertshaw - Fulton Con-

trols Co., described the "thermal eye" temperature control on top of the range as "the first cousin to the oven heat control." This revolutionary new control now is featured on 1956 models of various well-known kitchen ranges, she explained.

"It eliminates scorched pans, boil-overs, scouring," she said. "And it prepares food better."

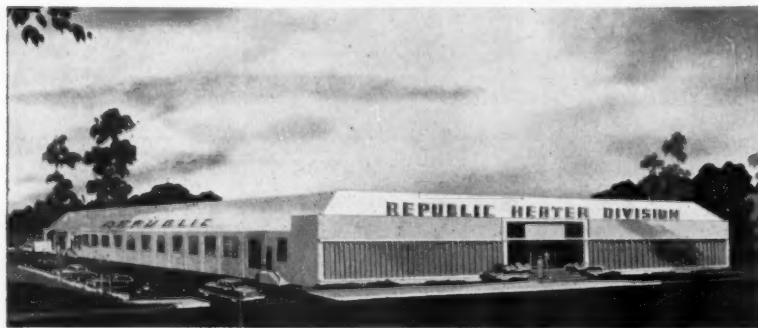
"What's more, it eliminates the necessity of paying close attention to what goes on on top of the range—because the control turns down the gas when the dialed temperature is reached, turns the flame up again as needed." In this respect, she added, thermostatic controls mean inexpensive cooking "because the heat is on only when you need it."

Demonstrating these points, Miss Shields prepared an entire meal in the home economics kitchen at Public Service auditorium where the meeting was held.

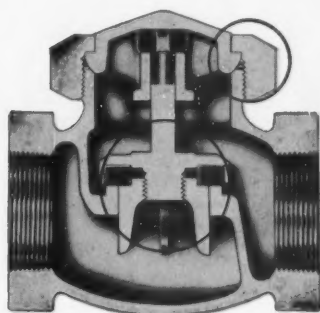
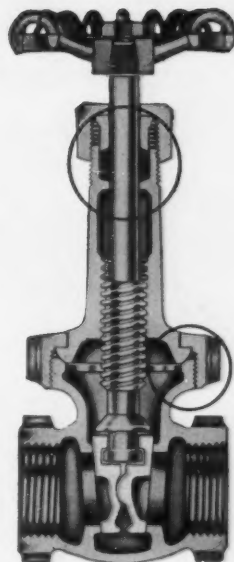
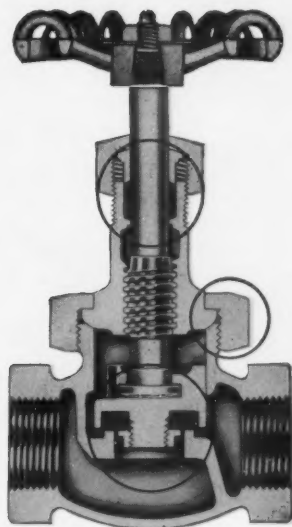
Expansion move planned by Ammonia institute

R. H. Wooten, one of the organizers of the Agricultural Ammonia Institute, was elected president of the group at its fifth annual convention held recently in Kansas City, Mo.

In an expansion move, the board of directors of the AAI voted to accept a proposal by the Great Plains



This is the Los Angeles plant of the Republic Heater division of Odin Stove Manufacturing Co. Republic is celebrating its 25th anniversary.



GATES - GLOBES - ANGLES - CHECKS

Special synthetic packing in the amply proportioned stuffing box provides an absolute seal and reduces stem friction. Best packing there is for volatile fluids!

Line-contact, body-bonnet joint is designed for a leakproof seal by mating the spherical seat on the bonnet with an angular seat on the valve body.

Renewable synthetic discs on globe and angle valves are long wearing... and resilient for positive closure. Slip-on-type disc holders have adequate guiding to assure accurate seating.

... valves for positive control of L-P Gas!

All OIC Valves for L-P Gas service are Underwriter approved. They are recommended for volatile fluids, light oils, hot or cold water and air.

Valve bodies are sound, cast of A. S. T. M.—B61, steam bronze and fitted with heavy, union-type, body-bonnet connections for long leakproof service.

Stems are accurately machined of OIC 40 Alloy (an aluminum-silicon-bronze which won't gall or seize).

For complete information on sizes ($\frac{1}{4}$ " to 3"), pressures (400 lbs. WOG, non-shock) and prices, write for the OIC L-P Gas Folder, Form 1002 or contact your local OIC Distributor.



V

VALVES

THE OHIO INJECTOR COMPANY • WADSWORTH, OHIO

BRONZE & IRON, FORGED & CAST STEEL;
LUBRICATED PLUG VALVES



Where does **DANGER** stop and **SAFETY** begin?

● Hazardous locations may be only in the immediate vicinity of tanks, pump rooms and filling rooms... or they may extend into far wider areas. The National Electrical Code defines certain areas as Class I hazardous locations where explosion-proof electrical apparatus is mandatory. But it takes a specialist to be completely sure that questionable areas have ample protection.

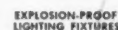
Special Field Engineer Service. Let us help you be sure that *your* electrical equipment conforms to Code requirements in *every* necessary location. An experienced Crouse-Hinds Field engineer at one of the offices shown below will be glad to look over new plans or present plant, without obligation.

Choose From Thousands of Products. Crouse-Hinds produces a complete line of explosion-proof equipment to meet the exacting demands of producers and distributors of L-P gas. (A few items are shown here.)

Send For Free Booklet. This comprehensive 82-page booklet gives explosive characteristics of butane and propane gas... contains Articles 500 and 510 of the latest revised Code... and numerous installation diagrams and photographs.



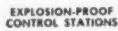
EXPLOSION-PROOF SWITCHES



EXPLOSION-PROOF LIGHTING FIXTURES



EXPLOSION-PROOF PLUGS & RECEPTACLES



EXPLOSION-PROOF CONTROL STATIONS



EXPLOSION-PROOF MOTOR CONTROLS



CROUSE-HINDS COMPANY

SYRACUSE 1, N. Y.

OFFICES: Birmingham Boston Buffalo Chicago Cincinnati Cleveland Dallas Denver Detroit Houston Indianapolis
Kansas City Los Angeles Milwaukee New Orleans New York Philadelphia Pittsburgh Portland, Ore.
St. Louis St. Paul San Francisco Seattle Tulsa Washington
RESIDENT REPRESENTATIVES: Albany Atlanta
Baltimore Baton Rouge Charlotte Chattanooga Corpus Christi Jacksonville Reading, Pa. Richmond, Va. Shreveport
Crouse-Hinds Company of Canada, Ltd. Toronto, Ont.

CONDUITS • FLOODLIGHTS • TRAFFIC SIGNALS • AIRPORT LIGHTING

Agricultural Ammonia Association by which more than 200 members of the Great Plains will join the national association.

In accepting the unification plan, the AAI board said the move was made because many members of the Great Plains group also were members of the AAI Great Plains division, and competition between the two groups would be eliminated and duplication of effort would be avoided.

Other officers elected at the meeting, which attracted more than 800, are Tilly Talbot, Audubon, Iowa, and C. M. Corken, Oklahoma City, vice presidents; M. O. Rasberry, Helena, Ark., treasurer; M. H. Carter, Greenwood, Miss., secretary; and M. C. Craft, Springfield, Ill., retiring president, and Larry Wright, Bartlesville, Okla., were elected directors of the executive committee.

Neumann and Rasmussen form own company

Jack Neumann and Ed Rasmussen, formerly of Trageser Copper Works, have formed the N & R Sales Corp., 36 Parkway, Goshen, N. Y., as manufacturers' representatives.

They have already contracted to represent Steel Cooperaage Division (Lee cylinders), Burnham Corp. (ASME systems), and Breinig Bros. (paint).

They will cover the territory from Maine to Florida.

Record pace of appliance shipments continuing

Automatic gas water heater shipments already have exceeded the all-time full year record established in 1950, according to the November figures released by the Gas Appliance Manufacturers Association.

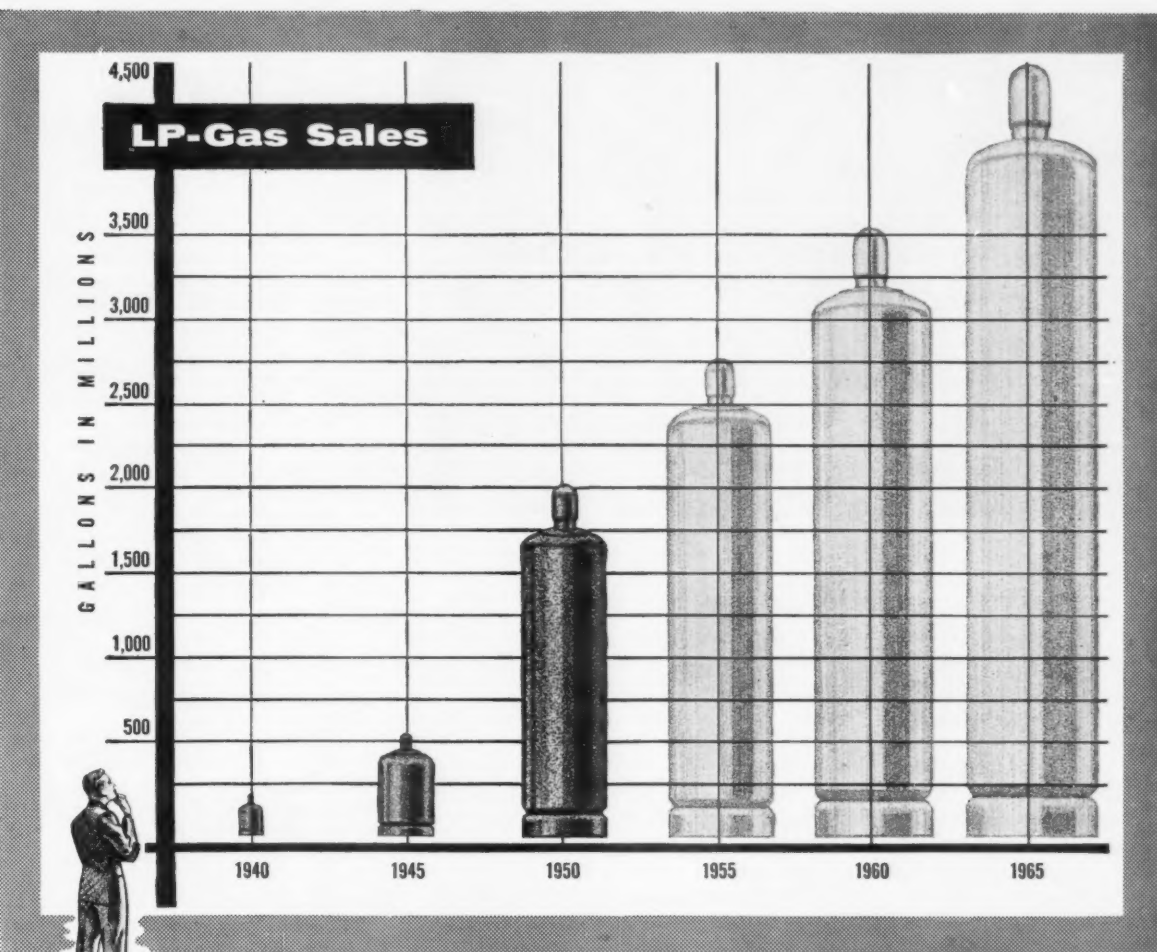
November shipments reached 192,500 units, an increase of 7.5% over the 179,100 shipped in the same month in 1954. Shipments for the 11-month period reached 2,559,800 units, a 21.1% increase over the number shipped in the same period last year and greater than the 2,364,500 shipped in all of 1950, the previous record.

Gas central heating unit shipments continued their record-setting pace during November.

During November, gas-fired boiler shipments exceeded the previous full year mark set in 1954. The shipments of gas-fired warm-air furnaces exceeded the previous record full year mark in October.

Boiler shipments to dealers and

BUTANE-PROPANE News



Are you keeping pace with the industry?

During the past 15 years, the LP-Gas Industry has actually expanded 1,978%. Growth forecasts for the next 10 years indicate the Industry will become nearly twice as big as it is today.

There's only one way for you to keep pace . . . and that one way is to expand—in plant facilities and in customer service.

If you don't have adequate capital available for immediate expansion, investigate the services offered by LPG Credit Corporation. Our Financing Plans are especially designed to fit the needs of the Industry. They can help you grow by:

- financing **your customers'** purchase of appliances, gas systems and initial gas supply as a single transaction.

- financing **your** purchases of bulk storage tanks, tank trucks and transports.

- financing **your** purchases of appliances, cylinders and tanks.

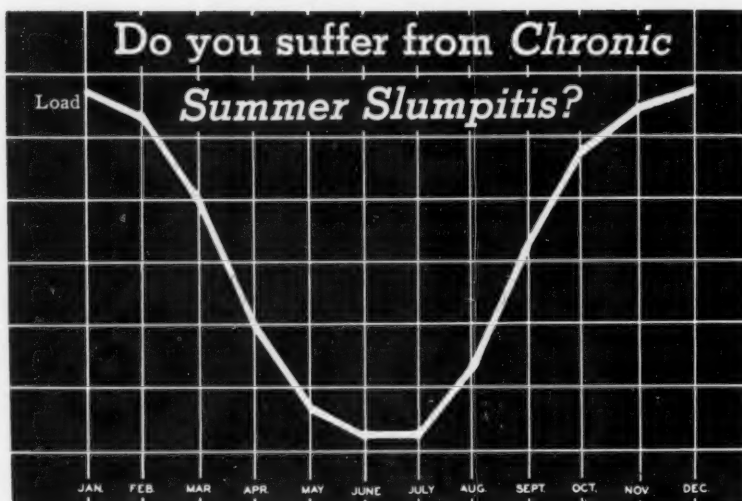
80% of all major appliances are sold retail on an installment basis. With LPG Credit Corporation Financing Plans you can obtain your share of this big appliance market and at the same time conserve your working capital for other current needs.

Inquiry on your company letterhead is invited. Write today to LPG Credit Corporation, 312 E. 131st Street, Cleveland 8, Ohio.

To help your profits grow...



Credit Corporation



Cause: Summer inactivity.

Occurrence: Widespread. It is particularly prevalent among LP-Gas Dealers who show great susceptibility to Chronic Summer Slumpitis.

Symptoms: Patient's hair is usually prematurely grayed, eyes blood-shot from lack of sleep, and he complains of a "sinking" feeling. The first symptoms generally appear early in June . . . about the time the patient examines his Profit & Loss Statement for May. This is the inception of the critical period lasting from three to four months during which the patient suffers from worry and extreme anxiety. As the critical period progresses, the danger of complications becomes acute. Principal complications are gastric ulcers, hypertension, neurosis, mental fatigue and, in extreme cases, a general breakdown. If the patient survives the critical period, his chances of recovery are good, as the advent of cold weather seems to alleviate Chronic Summer Slumpitis. However, without proper treatment, relief is only temporary, and a recurrence of the disease may be expected the following summer.

Treatment: Surgery performed in an attempt to reduce output by cutting overhead to the bone is, in most cases, unsuccessful as the patient's system is geared to a certain committed output. As inactivity is the primary cause, rest does no good, and only increases severity. Diet apparently is of little importance, although it has been noted that most sufferers eat less during the critical period. The only sure cure for Chronic Summer Slumpitis is prevention.

Preventative Measures: A preventative providing permanent protection from Chronic Summer Slumpitis is available. "AG LP-G WB & FF E" has been developed by the laboratories of the Agri-Quip Corporation who pioneered research in this field. It can be self administered.

Conclusions: There is no need to suffer from Chronic Summer Slumpitis. It can be prevented. Agri-Quip LP-Gas Weed Burning and Field Flaming Equipment is the preventative. Be an Agri-Quip Dealer and benefit three ways . . . increased summer load . . . profit on sale of equipment . . . a better balanced and more efficient operation.

Write, wire or call for catalog and price list today. Don't leave yourself wide open to the ravages of Chronic Summer Slumpitis . . . be an AGRI-QUIP DEALER!

Agricultural Equipment Corporation
BOX 200-A LA JUNTA, COLORADO

*Pioneer Manufacturers of LP-Gas Burners for
 Agricultural and Industrial Applications*

distributors reached 7800 units during November, up 1.3% over the same month last year. In so doing, shipments for the 11-month period totaled 84,900 units, an amount greater than the 80,200 shipped during all of 1954, the previous record year.

Gas-fired warm air furnace shipments set a new record for November with 78,200 units, a gain of 21.6% over November 1954. Shipments for the 11-month period have soared to 782,100 units, a gain of 29.1% over last year, which had been the record holder.

Conversion burner shipments continued to show strength, reaching 21,300 units, a gain of 33.1% over last November. This boosted the 11-month total to 201,100, or just 6.6% behind last year's pace. The last half of the year has been a substantial one for conversion burners since they were more than 30% behind last year's shipments at the six months' mark.

Karber Gas sells cylinder business to Metrogas Inc.

According to Ralph L. Sieben, president of Metrogas Inc., Chicago, his company has completed the purchase of the Karber Gas Appliance Co. at Metropolis, Ill.

Karber Gas has been operating a cylinder and appliance business in Metropolis since 1948. With the deal, Metrogas acquired approximately 900 additional customers. Mr. Sieben stated that the acquisition is a continuation of the company's recent policy of expansion in the areas it has been serving.

Mr. Karber retained his appliance business.

New TV series offered to gas companies

A series of 13 half-hour television shows—starring Dione Lucas—is being offered to gas utilities on a free basis, according to Robertshaw-Fulton Controls Co., which is making available the filmed television package. Gas utilities accepting the films will pay only for the local airtime plus a small service charge.

The nationwide show, sponsored last year by 84 gas utilities across the country, is aimed at encouraging consumer interest in automatic gas cookery and the use of gas as the modern home fuel. Particular emphasis will be placed on automatic top burner temperature controls.

C. S. Stackpole, managing director of the AGA, stated "This exciting national TV program . . . provides a

Here's The New BS&B "PERFECTION" PROPANE SYSTEM ... With The Golden Dome!

Fully Automatic Welds

Complete double pass with integral backing strip, full penetration. Exceeds all Code requirements.

Recessed Internal Relief Valve

Provides maximum safety. Working parts are inside the tank where they are protected from damage.

One Piece Dome

Provides complete weather protection for controls. Fitted with hinge and offset latch for quick opening action. Rigid construction.

Heavy Lifting Lugs

Placed far out on the heads of the tank for better balance and ease of handling.



Bottom Outlet

1 1/2" bottom opening for liquid take-off. Located in head with maximum ground clearance for easy access.

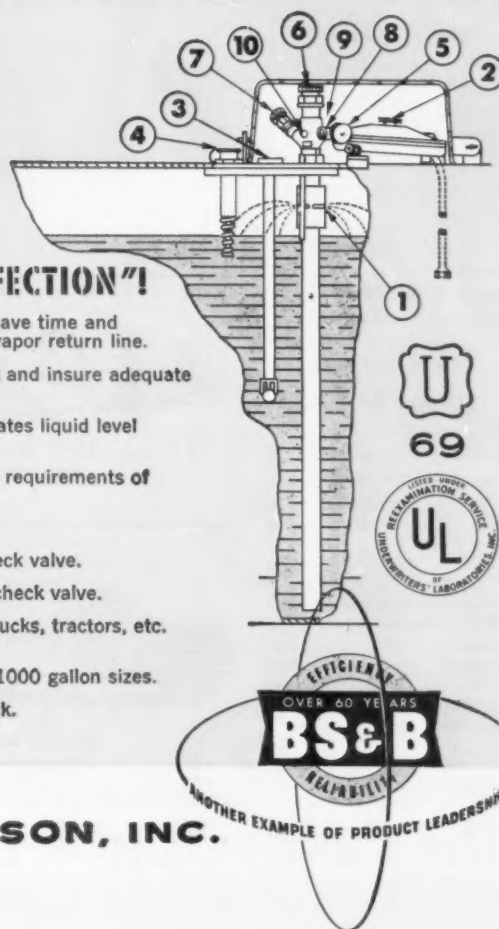
Sturdier Leg Design

One piece channel supports, press formed, wrap around. Provides more than 200 sq. inches bearing surface.

These 10 Outstanding Features Will Sell Your Customers On "PERFECTION"!

- 1 SPRAY FILL ADAPTER* can be placed in liquid piping to save time and maintenance. Allows tank to be filled to capacity without vapor return line.
- 2 LARGE HIGH CAPACITY REGULATOR sized to match tank and insure adequate flow rates under all conditions of normal service.
- 3 EASILY READ MAGNETIC FLOAT GAUGE accurately indicates liquid level in tank at a glance.
- 4 RECESSED INTERNAL RELIEF VALVE sized to exceed the requirements of Underwriters' Laboratories.
- 5 POSITIVE SHUT-OFF VALVE at service connection.
- 6 HIGH CAPACITY FILLER VALVE equipped with double check valve.
- 7 HIGH CAPACITY VAPOR RETURN VALVE equipped with check valve.
- 8 EXTRA LIQUID CONNECTION for convenient service to trucks, tractors, etc. (Standard on every PERFECTION System.)
- 9 EASILY READ PRESSURE GAUGE. Standard on 750 and 1000 gallon sizes.
- 10 FIXED LIQUID LEVEL GAUGE to prevent overfilling of tank.

*Optional at slight additional cost.



BLACK, SIVALLS & BRYSON, INC.

Propane Equipment Division, Dept. 6-AB2

7500 East 12th Street • Kansas City 26, Missouri

real opportunity to stimulate greater public acceptance of gas as a truly modern cooking fuel."

Urging all gas companies to "give serious consideration" to the Robertshaw film offer in local gas range sales and promotional campaigns, he said, "I sincerely believe that it (the Dione Lucas show) merits the support of all gas utility companies."

In assuming the production costs of the series, Charles M. Stainton, vice president and director of sales for Robertshaw, said his company is providing the opportunity to local companies to bring to their market



Dione Lucas serves warm plum tart to gas industry executives in television studio kitchen following her daily homemaker show. From left are Frank H. Post, assistant vice president, Robertshaw; C. S. Stackpole, AGA; and Harold Massey, managing director, Gas Appliance Manufacturers Association.



SERVICE • QUALITY • SATISFACTION

A Complete Line of Single and Twin Barrel Propane Truck Tanks

TWIN BARREL

Very popular model. Can furnish in any capacity you desire. Custom made, to your specifications. A unit to be proud of.

TRANSPORTS

Can furnish in single or twin barrel type. Unit constructed so load can easily be shifted to meet different type tractors. Payload makes you money, this is our specialty.

SINGLE BARREL

For one fuel operation, the 1200 single meets all requirements, can furnish any capacity you desire. The leader in its own field.

Send Us Your Specifications and We Will Submit Quotations.

Complete Modern Shop Facilities for Mounting and Testing All Pumping, Metering and Propane Handling Equipment.



TWIN BARREL



TRANSPORT



SINGLE BARREL

"EVERYTHING IN LPG AND ANHYDROUS AMMONIA"

The Pasley Mfg. & Dist. Co.

601 East 11th Street • Kansas City, Mo. • Tel. Victor 2369

area top-flight TV at little more than the cost of station time.

A complete package of promotional materials, including point-of-sale material, newspaper ad mats, brochures for range salesmen, and material on new top burner controls, will be available.

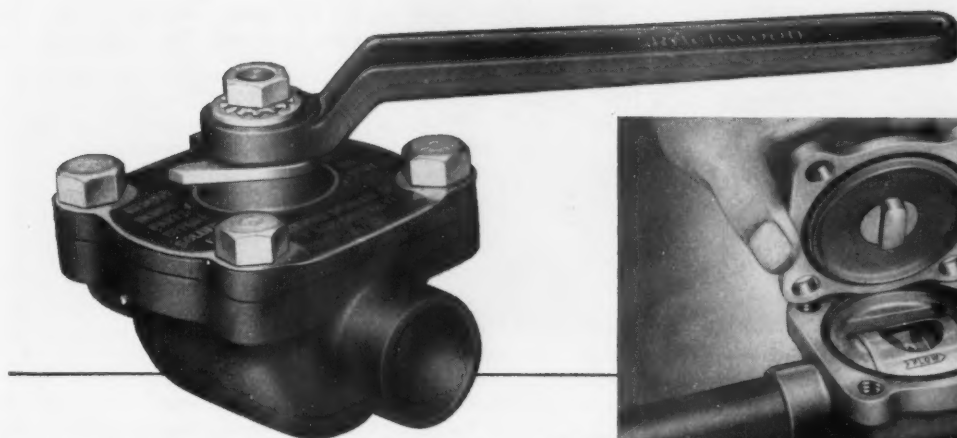
Arrangement of the half-hour show includes three spots of one minute each, in which sponsors can present their own commercials or other messages. Robertshaw-Fulton will also make available a selection of commercials.

It is expected that 50% of the country's more than 27 million residential users of gas will be able to see the Dione Lucas Show when the new series is first shown on March 1. Miss Lucas will present her entertaining cooking program on a specially constructed composite range, whose maker will be unidentifiable. In addition to preparing foods using the new automatic top burner control, Miss Lucas will offer food hints, menu-planning suggestions, table-setting short cuts, and a new question-and-answer feature.

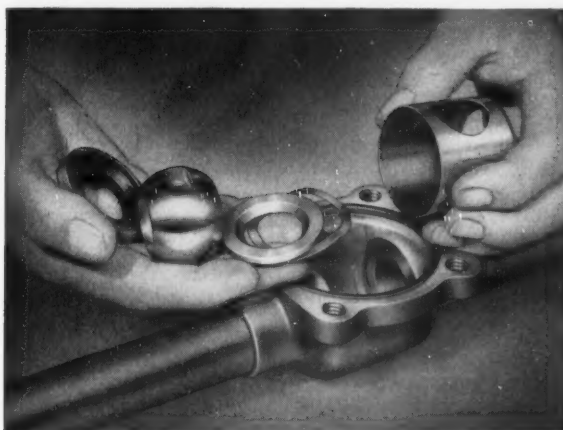
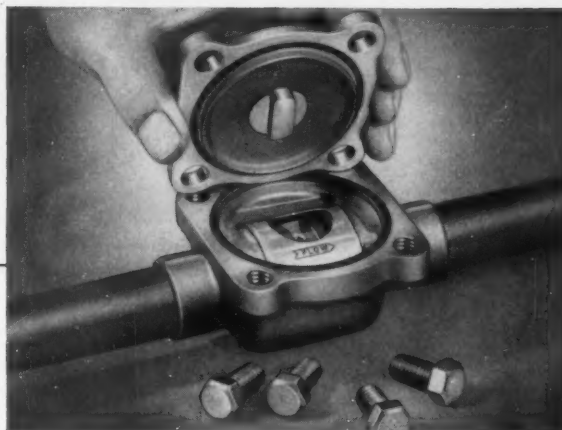
Temco uses railroad theme for national sales meet

Temco Inc. held its annual national sales meeting Dec. 12-15 at Nashville, Tenn., using railroad props to set the stage for the four-day session. The program was printed in the form of a railroad ticket and F. D. Hart, executive vice president, welcomed the salesmen aboard for the sales ride of their lives.

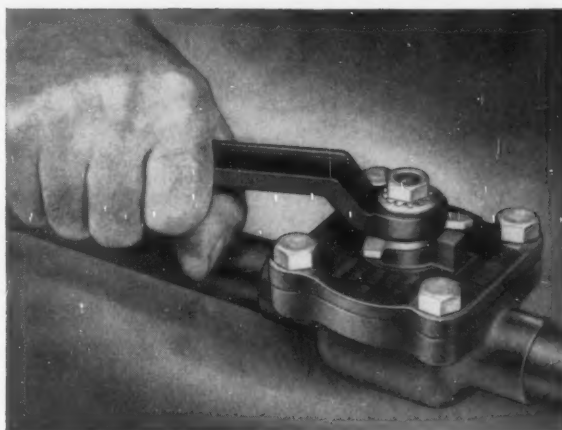
Cecil Oakley, sales manager, presided during the four-day meeting and outlined sales and promotional



FAST, LOW-COST CHANGE IN DIRECTION OF FLOW. Removal of the body cap permits reversing the cage assembly to allow change in direction of flow. In addition, this feature lets you change seat material, and clean the valves thoroughly and quickly — *without removing the valve from the line!*



INTERCHANGEABILITY of seat material to meet your operating requirements is another feature of the Rockwood Top Entry Ball Valve. Seat can be furnished in Buna-N, Neoprene, Kel-F, Teflon, and Nylon.



EASY INSTALLATION AND OPERATION is permitted because of the new handle design. This new design allows the handle to be placed in any of *eight positions!*

Now!... New Rockwood Top Entry Ball Valve

... A new concept in valves that saves you money and time!

Made of bronze the new Rockwood Top Entry Ball Valve is ideal for handling oxygen and hazardous liquids as well as water, oil and gas. It carries 300

lbs. per square inch on water, oil and gas and 400 lbs. per square inch on LP gas and is available both with sweat ends and screw ends, in sizes $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1".

Write for complete data on this unique full round pipe size flow.

ROCKWOOD BALL VALVES



Distributors in all Principal Industrial Areas

FEBRUARY, 1956



ROCKWOOD SPRINKLER COMPANY
709 Harlow Street
Worcester 5, Mass.

Please send me complete information on Rockwood Top Entry Ball Valves.

Name.....
Title.....
Company.....
City.....
Zone....State.....



Shot taken at "Quiz Poker" game—a club car interlude during Temco's sales meeting. W. S. Graham of Noble-Dury & Associates presented the national ad campaign for 1956, using a question-and-answer technique with prizes going to salesmen holding best poker hands at the end of quiz.

plans for 1956. A highlight of the program was a two-day training seminar on Temco's new central heating and air conditioning equipment. Lee W. Rasch, manager of the central heating division, conducted this training session.

Subdivision features all L. P. gas homes

A Jefferson county, Ky., subdivision, Beuchel Terrace No. 3, features 38 L. P. gas-equipped homes.

The homes, built to sell for from \$11,000 to \$13,000, will be furnished with Caloric built-in ranges, gas clothes dryers, gas water heaters, and gas furnaces. They will be equipped so that gas garbage disposers may be added at a later date, according to W. L. Riedling, Caloric Appliance Corp., who was instrumental in selling the realty company on the idea.

L. P. gas installations will be made in underground tanks, piped to the houses, metered at the homes; bills will be rendered monthly.

N. C. State College plans two summer short courses

Two four-week courses in gas technology will be offered this summer at North Carolina State College, Raleigh. The college's Department of Chemical Engineering and the Extension Division will conduct the courses, which will run from June 4-June 29 and July 9-Aug. 3.

Practical instructions, in lecture and discussion form, will be given through shop and laboratory sessions in the technical aspects of L. P. gas, natural, and manufactured gas. Frank Seely, director of the short course and associate professor of chemical engineering, and C. A. Plank, instructor in chemical engineering at North Carolina State, have been named as instructors.

Subjects to be covered include general behavior of gases, heat and temperature, properties of gas, compressed gases, safety practices and hazards, proper and safe methods of house piping and installation, simple regulators, metering—vapor and liquid, proper equipment and installations, pipelines, principles of combustion, testing for leaks, adjustment of burners, controls, pilots, design of burners, conversion, installation and

High Fashion on a low budget!

The feature-laden range that combines appearance, utility, and economy



This range is being featured in national consumer advertising. Get in on the profits! Write for full information and prices.

BROWN
Chrome Top
GIANT OVEN
gas range

Eye-catching features

- Gleaming chrome top
- Beautiful copper escutcheon
- Black and copper "Blue Flame" control knobs
- Full width chrome lamp visor
- Modern high backguard
- Contemporary styling throughout

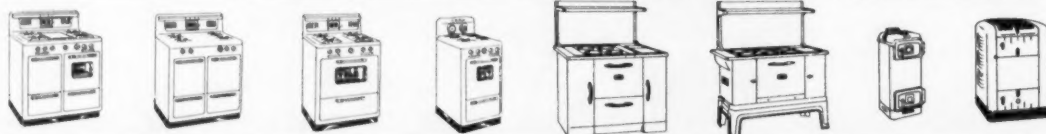
Functional beauty features

- Giant Oven—23" wide inside
- Black and copper electric clock and 4-hour timer
- Extra wide Windoor with light in oven
- Electric lamp
- Concealed venting
- Porcelain enamel finish

Utility features

- Micro-Lite instant top burner ignition
- EZE-Out oven bottom
- EZE-Kleen completely removable broiler
- Drilled aluminum alloy burner caps
- Universal type valves
- Porcelain drip trays
- Porcelain burner box bottom
- Fiberglas insulation
- Can be ordered to meet full "CP" requirements

BROWN STOVE WORKS, INC., Cleveland, Tennessee





This plant is safer since they put these Crane valves on hazardous fluids

THE CASE HISTORY—How safely you handle hard-to-hold combustible fluids can depend on the valves you use. Read how a large Midwestern printing and binding plant, by changing to the right valves, encouraged employee care and safety while stopping hazardous leakage and waste.

The plant's supplies of kerosene, naphtha, benzol and similar fluids were stored in a fireproof room. But the danger was in the constant dripping and leakage at the tanks.

The original pump apparatus on the drums was discarded and ordinary valves were installed for drawing supplies. Still the hard-to-

hold fluids dripped and leaked—through the valve packing and stuffing box, and at the seats. Fluids were lost . . . the high maintenance costs continued . . . and the unsafe conditions remained.

Changing to Crane No. 130 brass valves on the drum outlets stopped all previous trouble.

To-date they've given more than a year of leak-free, maintenance-free service. These valves have special features for handling light oils, gases and volatile fluids.

Underwriters' Laboratories approved for LP-gases, Crane No. 130 valves have a composition disc soft enough for tight seating, yet stiff

and resilient to take hard wear. The disc, cemented in its holder, prevents around-the-disc leakage. The stuffing box with molded asbestos packing is extra deep for durable stem sealing.

No. 130 valves are typical of Crane quality and value, and the complete selection you have in the Crane line in valves and fittings for every flow control need.

You'll find that specifying and ordering Crane materials will lead to lower ultimate costs for your piping equipment.



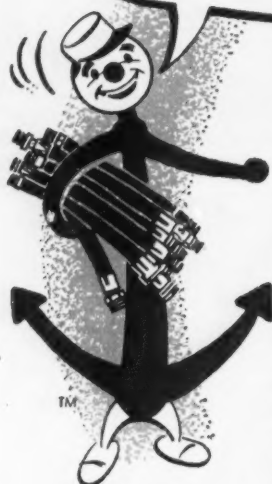
CRANE VALVES & FITTINGS

PIPE • KITCHENS • PLUMBING • HEATING

Since 1855—Crane Co., General Offices: Chicago 5, Ill. Branches and Wholesalers Serving All Areas

FEBRUARY, 1956

**ARE YOU SURE YOU ARE USING
THE HOSE ASSEMBLY
BEST SUITED TO YOUR PURPOSE?**



**I would like to make
a suggestion!**

Hose Assemblies, Couplings and Fittings are not just made — they are a specialty and serve only as well as the design, production and application "know-how" of their manufacturer. Yes — you have heard all kinds of high sounding claims, but we both know claims are a dime a dozen. I would like to suggest that you accept only the LPG and Anhydrous Ammonia Hose Assemblies, Couplings and Fittings that are designed to your specific needs by engineers who have made an actual field study of that need. In that case, you will profit greatly from the many years of Anchor experience. Every problem, common as it may seem, receives careful consideration by Anchor, with the result that you will save dollar after dollar through longer and more efficient Hose assembly service. Consult Anchor on all your Hose Assemblies, Couplings and Fittings and be assured of a right product.

Meanwhile—let me send you **Bulletin No. 500** on Anchor's LPG and Anhydrous Ammonia Hose Assemblies, Couplings and Fittings.

Also, Bulletin No. 100 — Anchor pressed-on Assemblies — **Bulletin No. 300** — Reusable Couplings.

(Both for hydraulic applications—high, medium and low pressures.)

If you have a special problem please send it to Anchor for recommendations.

Andy Anchor



ANCHOR COUPLING CO. INC.

317 North Fourth St. • Libertyville, Illinois
Branch Offices: Dallas, Tex.; Plymouth, Mich.

servicing of water heaters, venting, competitive fuels, gas ranges, refrigerators, human relations, pumping gases, industry literature, gas main service, heating equipment.

Tuition for the four-week course is \$100, which includes all text and laboratory materials required for completion of the course. Classes will be limited to 30 students.

Further information is available from the College Extension Division, Box 5125, State College Station, Raleigh, N. C.

Louisville produce market uses LPG for three jobs

Fifty-four units of the Louisville (Ky.) produce market are heated with propane metered service, supplied by the Big 3 Gas Co., headed by Irvin F. Etscorn, president. In addition to the heating job, the company provides the market with L. P. gas for water heating and cooking. The market distributes all vegetables and fruits for the Louisville area as well as for a large section of Kentucky and southern Indiana.

The L. P. gas installation, including two 6000-gal. propane tanks, meters, and complete equipment, was engineered and supervised by Mr. Etscorn, who is vice president of the Kentucky L. P. Gas Association and chairman of its industrial development committee.

Gross receipts tax fight shaping up in Texas

The fight against imposition of the state's gross receipts tax on Texas butane dealers is moving steadily ahead. Progress of the effort, in which the Texas Butane Dealers Association is taking an active part, was outlined at the mid-winter meeting in San Antonio, Jan. 21.

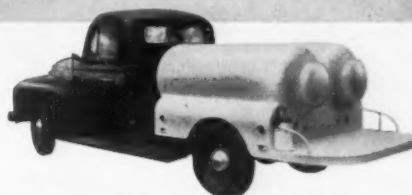
This fight, instituted by the Eddins-Walcher Butane Co. of Rankin against the state comptroller seeking to prohibit him from collection of gross receipts taxes from butane dealers, has a direct and important financial bearing on every L. P. gas operation in the state. This case is a test of the authority of the comptroller to collect the tax and of the authority of the attorney general to interpret the law as applicable to the butane industry.

Action came first in the case when the Rankin firm was called on to pay to the comptroller the sum of \$248.42, the amount the state claimed as due under the gross receipts levy. The payment was made under protest and legal action was started. Soon after the Rankin dealership entered the

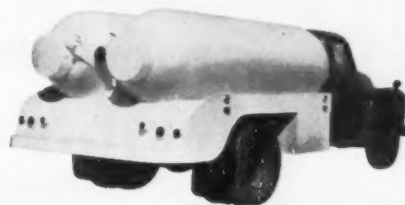
it DOES make a difference WHO builds your next tank!



In our many years in business we have encountered some of the most exacting specifications from firms all over the country...coast to coast and Canada to Mexico...who demand and have the money to buy the best, and whatever the job...whether for one unit or an entire fleet...whether for a hot-shot bottle refill unit or a multi-thousand gallon transport...they all get the same care and my personal supervision. Whatever your problems, you can bring them to us with complete confidence knowing that their solution will be backed by 32 years' successful experience.



You'll find that each of our units has the same strength, utility and design for economical service, be it the small "hot-shot" bottle fill unit...the 1,200 to 2,000-gallon



delivery unit with its smart flowing lines, or...the big,



multi-thousand gallon step-down transport which has attracted the attention of the press because of its unique design, balance and all-around safety features.

FEATURES:

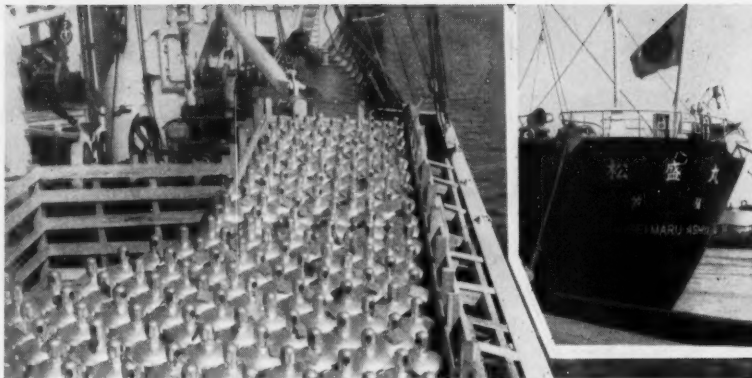
- **SCIENTIFIC KNOW-HOW**
plus years of experience insure safe, efficient, economical operation.
- **INDIVIDUALLY ENGINEERED**
Each job is an individual operation using the latest methods, tailored to meet state requirements and maximum payload.
- **REAL CRAFTSMANSHIP**
We employ only trained and skilled mechanics who take pride in their work.
- **PROPER SUPERVISION**
Every job is carefully and personally supervised.
- **ANY SIZE — ANY STYLE**
Whatever your needs...on the ground, on skids, on wheels...our Engineering Department is capable of turning out a specific model for a specific use.
- **IT PAYS TO GET THE BEST EQUIPMENT**
In the long run, it is not only service but **ECONOMICAL** service that counts. Dal-Worth has established a record for that!



DAL-WORTH
TANK
COMPANY
W. G. (Red) Brumit, Owner
BOX 818
GRAND PRAIRIE
TEXAS

legal arena against the comptroller and the attorney general the association stepped in to stand shoulder to shoulder with the embattled dealer, and the Dallas law firm of Weathered, Gearry & Shelton was brought into the picture as TBDA counsel.

The gross receipts tax, originally enacted into law in 1907, specifically levies a tax on gross receipts of gas, electric light, electric power or water works or water and light plants in incorporated areas. At that time, the association contends, the butane industry as such was not in existence, and the legislature which enacted the



Pictured here is a shipment of Petrolane cylinders on their way to Japan.



Dollars all over the highway!...get your share with a

TEXAN

**THE COMPLETE PACKAGED
LPG FILLING STATION**



The Texas L.P.G. Service Station is fabricated in our plant, completely assembled and moved to you as one unit. Constructed in accordance with the A.S.M.E. Code. Complying with all rules and regulations for safe and economical operation.

If you are an L.P.G. Dealer and want to capture some of those highway dollars, then the "TEXAN" is the answer.

The "TEXAN" comes in all sizes to fit your need. For details, write, wire, phone us today for complete information.

Industrial
MANUFACTURING CO. of TEXAS, INC.

POST OFFICE BOX 698
SWEETWATER, TEXAS
Phone 4862

gross receipts tax bill into law could not have meant to include it under the provisions of the act. Subsequent legislatures have broadened the law but have failed to include the butane industry specifically within its scope. It is on this contention that the Edins-Walcher Co. and TBDA have joined forces to contest collection of such taxes from butane dealers.

Collection of the tax, if legality of such action is finally upheld, will add greatly to the industry's tax burden, it is pointed out. For this reason, the strength and resources of the association have been brought into the picture to defend the industry from what is considered unjust collection of a levy that was never intended to apply to dealers in liquefied petroleum gas.

Liquefied petroleum gas no longer insurance risk

"The handling of liquefied petroleum gas has been raised to such a high level of security," said Louisiana insurance leader John Singreen, "that it is probably as safe, or safer than natural gas."

Mr. Singreen is newly appointed as a member of the Liquefied Petroleum Gas Commission by Gov. Robert Kennon. He also is president of the New Orleans Insurance Exchange, an organization of more than 160 local capital stock insurance agents.

"In days gone by," said Mr. Singreen, "the mention of butane as a risk to a company insurance executive was like suggesting a drink of fatal poison. In rural regions now, L. P. gas has found a ready-made niche . . . reaching where natural gas mains cannot be built economically. It's less expensive than coal and electricity in many areas and has the

Continued on page 93

There's lots of money for you...
in empty pockets



Thanks to
DAY & NIGHT'S
revolutionary new
**WATER HEATER
TIME PAYMENT
PLAN**

NOW!

Most water heater replacements are emergency purchases.

Folks have to buy on time. "How much a month" is all they worry about. If you make it easy for them to buy — they'll buy the best. And Day & Night makes it easy for you to make it easy for them.

DAY & NIGHT gives you
an exclusive easy-to-use
time payment plan!

- ✓ NO RECOURSE
- ✓ NO DELAY — YOU DON'T NEED A CREDIT OKAY
- ✓ NO DOWN PAYMENT — TWO YEARS TO PAY
- ✓ NO HOLDBACK — NO COLLECTION WORRIES

—exclusive advantages when
you sell **DAY & NIGHT**

*This Time Payment Plan gives
you a tremendous advantage—*

- More prospects come to you when they know they can buy on easy terms.
- It is easier to close more sales when you have a clincher like — "Only \$5 a month!"
- It is easier to upgrade a sale to top-quality items when monthly payments are more important than total costs.

—exclusive advantages when
you sell **DAY & NIGHT**

Call your Day & Night distributor for complete details.

Another reason more dealers say
—it pays to sell the best—

jetglas.

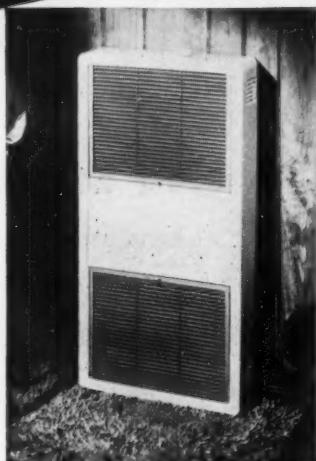
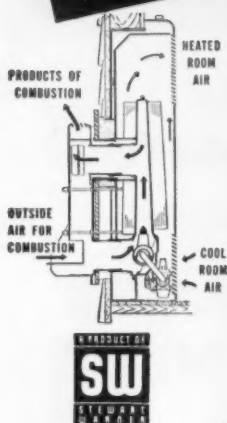
DAY & NIGHT

MANUFACTURERS OF AMERICA'S FINEST WATER HEATERS
HOME HEATING AND AIR CONDITIONING EQUIPMENT
DAY & NIGHT, MONROVIA, CALIFORNIA



**FOR LP
GAS**

...HEATS ONE
ROOM OR AN
ENTIRE HOUSE



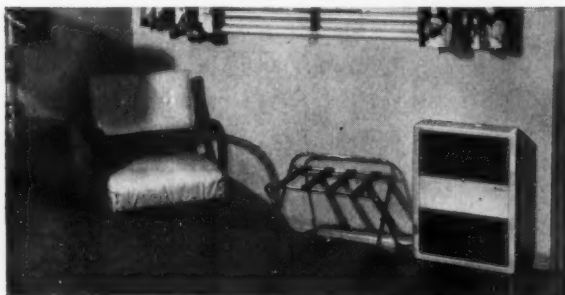
Saf-Aire burns gas in a ceramic-lined steel chamber, completely sealed from the room air being heated

The perfect unit for heating added rooms...hard-to-heat rooms...enclosed porches...garages...workshops...other apartments...complete homes. Each Saf-Aire operates independently and has optional thermostatic control. Fool-proof...maximum safety is assured under all conditions of use.

Here's why Saf-Aire offers safer, cleaner, better heating

1. Uses only outside air for combustion—no stuffy, suffocating rooms.
2. Combustion products are vented to the outside—cannot enter the room.
3. No chimney, ducts or electricity required.
4. Easily installed through the wall.
5. "Zone Controlled" warmth for every room or cabin.
6. Costs less to install—less to maintain.
7. Burns all gases, including LP.

WRITE TODAY FOR DESCRIPTIVE LITERATURE



Typical Saf-Aire installation in motel

STEWART-WARNER

U. S. MACHINE DIVISION—Dept. AT-26 Lebanon, Indiana



**Introducing
You**

**to one in every four*
of the finest families
in your community!**

* Actual figures for your locality on request

The local circulation of national magazines—the reader-impact in your own neighborhood—may surprise you. In some towns, fully two-thirds of the families subscribe to one or more of the magazines on White's list.* That's one of the many reasons White dealers scored phenomenal sales advances in '55, are slated for an even BIGGER and BETTER '56! To protect your own future, contact White TODAY!

**and here are the keys
to their doors!**



**POSTERS DIRECT MAIL NEWSPAPER
MATS**

...plus powerful **POINT OF SALE** displays and... a wealth of other **PROVED** promotions! "On its toes" all the time, to build YOUR sales and profits, is characteristic of White—as any White dealer or distributor can tell you. Ask for the White Proved Profit Story—right away!

White

WATER-HOTTERS
Automatic Water Heaters
For LP-Gas
White-Glass or
Zinc-in-ized Lining

WHITE PRODUCTS CORPORATION, Middleville, Michigan
Water Heating Specialists Since 1930 Div. of Lamb Industries, Inc.

WHAT'S NEW

IN PRODUCTS AND TRADE LITERATURE

For further information on items reviewed in this section use the convenient post-paid Readers' Service Cards on pages 91-92



Built-in ranges

Model: Modern Maid

Description: The new units from Tennessee Stove are available in either stainless steel or a combination of non-tarnishing antique copper porcelain accented with wrought iron black. A choice of three different ovens is offered, with 2- or 4-burner surface units and optional griddle.

The new banquet-size, built-in oven is exceptionally large and is available with fully automatic clock controls, automatic oven lighter and, as an added feature, a hood over the oven vent to keep walls clean.

Tennessee Stove Works

Circle 1 on Readers' Service Card

is no necessity of ever opening the diaphragm case.

Features claimed: Developed to meet today's advanced pressure regulation needs, the Weathco attains goals of maximum efficiency in performance, longer life by strengthening points of relative weakness in existing gas regulators; and offsetting of increasingly higher ratio of repair costs to initial price.

Extensive tests in temperature ranges of minus 30° to plus 130°F, and large-scale field use with actual installations in typical sections of the country have been conducted over a period of four years. A booklet (Form No. LPG-3079), which describes the points of difference in this regulator, is available.

Weathco claims its superiority through advancements in diaphragm action and sealing, plus improved alignment and action of the highly important valve seat mechanism. Overall streamlining has resulted in a compact 3-5/16-in. diameter size.

Weatherhead Co.

Circle 2 on Readers' Service Card

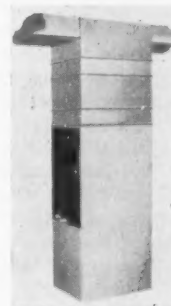


Regulator

Model: Weathco

Description: An innovation in regulator design is the Weathco diaphragm, which is not fastened to the body by bolts or screws. The long, accurately positioned valve seat is the heart of the new design from Weatherhead Co. By simply removing the inlet insert, easy access is provided for inspection, cleaning, and replacing the valve seat. There

Forced air furnace



A new series of Holly forced air furnaces is now available with the new feature, "air conditioning compatibility."

Purpose: This design was specifically engineered to permit the addition of air conditioning

in conjunction with Holly forced air furnaces, using one air duct system.

Description: The compactness of the furnaces is a space saving feature that reveals its importance to the builder when the home buyer wants air conditioning as an "extra." Holly design permits builders to offer air conditioning as an optional choice for home buyers. A builder can prepare homes for air conditioning now, or add it later, with a minimum additional cost.

Holly Manufacturing Co.

Circle 3 on Readers' Service Card

Trencher

Charles Machine Works new trencher has been designed to speed the installation of L. P. gas service lines.

Model: Ditch-Witch

Description: Digging depth is hydraulically controlled and can be instantly varied. The closed, self-cleaning bucket line is equipped with re-



placeable tool steel teeth and is available in either 4½- or 6-in. width. These two bucket lines are interchangeable. Digging speeds to 9 ft for minute are obtained, depending on digging conditions and model.

Features claimed: The Ditch-Witch cuts all light trenching costs by digging clean, even trenches to depths of 30 in. Numerous safety features prevent damage to the trencher when underground objects are encountered and a reversible spoils chute deposits spoils on either side of the trench for quick and easy backfilling. Mounted on small pneumatic tires and utilizing a vertical digging assembly, the Ditch-Witch trencher virtually eliminates any damage to existing lawns, yet can trench across a blacktop street.

Charles Machine Works

Circle 4 on Readers' Service Card

Dual fuel mixer

An adapter to supply a limited amount of propane in the intake air stream of diesel engines is offered by Ellis Manifold Co.

Purpose: Its purpose is to permit operation of the diesel engine on an amount of heavy fuel that is lean enough to provide smoke-free exhaust, augmenting this with propane at full-throttle operation to secure



the same or somewhat more power without producing troublesome amounts of smoke.

Features claimed: The manufacturer states that miles-per-gallon is higher with the two fuels than in straight diesel operation. The Ellis dual fuel mixer may be used with any make of propane regulator of appropriate size.

Ellis Manifold Co.

Circle 5 on Readers' Service Card



Shutoff valve

Model: Ensign Automatic

Purpose: For stationary and mobile installations.

Description: Ensign Carburetor's new shutoff valve is designed for 250-lb working pressure and has been tested in temperature exceeding 25° below zero. This new system of shutting off the flow of fuel from an L. P. gas tank to an engine consists of a vacuum-controlled diaphragm-type shutoff valve actuated by manifold vacuum. When the engine is shut off, or if the engine fails for any reason, manifold vacuum ceases and the valve closes instantly.

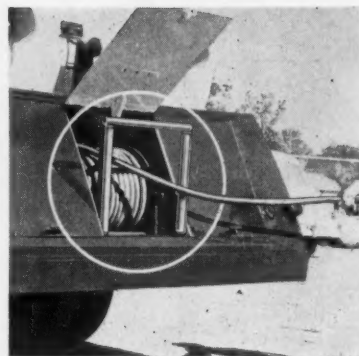
Features claimed: The unit shuts fuel off the instant the motor stops and it provides positive protection in case of line breakage. There are no electrical connections.

Ensign Carburetor Co.

Circle 6 on Readers' Service Card

Hose guide

A hose guide for electric reels which allows the hose to be unreel at a 90° angle from the tank has been announced by Master Tank & Welding Co. as optional equipment on all



Time Saver twin barrel LPG delivery trucks.

Purpose: The hose guide is designed for use in city deliveries where the operator sometimes cannot back his truck up to the domestic tank but must park parallel to it. Use of the hose guide eliminates the necessity for unreeling the hose straight out to the desired length and then pulling it over to the side by allowing the operator to unreel it at a 90° angle from the tank.

Construction: Rollers are fabricated of non-ferrous metal tubing to avoid scarring of the hose and are mounted on frictionless ballbearings for easy operation and durability.

Master Tank & Welding

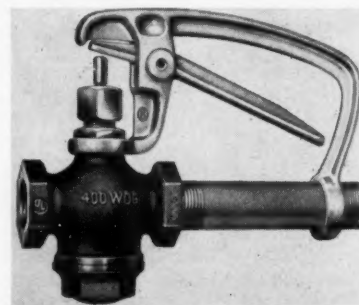
Circle 7 on Readers' Service Card

Bronze valves

Model: No. 8009 and 8001

Ohio Brass Co. announces two new bronze valves especially designed for liquefied petroleum gas service. Both are listed by Underwriters' Laboratories.

Description: A lever-operated valve, No. 8009, has a special safety feature to reduce chances of burns when LPG is being transferred from tank to tank. Designed for use as a nozzle, the 8009 permits back pressure to escape from the line in the



New products and trade literature • continued

direction away from the operator. It is recommended for use on pressures up to 400 lb and is available in three sizes, ½-, ¾- and 1-in., complete with malleable iron handle and 6-in. pipe nipple.

The No. 8001, also for up to 400 lb, has the conventional globe valve design. It features an outside bonnet and a slip-on disc holder to facilitate changing discs. It has the O-B "free swivel" action between disc holder and stem, contributing to longer disc wear. The 8001 comes in nine sizes from ¾ through 3 in.

Discs and packing in both valves are made of Buna-N, especially recommended for service on volatile materials like L. P. gas.

Ohio Brass Co.

Circle 8 on Readers' Service Card

Twin-dual water heater



Model: No. 40 4-flue twin-dual booster water heater.

Application: For hotels, motels, restaurants, and other installations where extra-high recovery is required.

Description: The new booster is a combination unit incorporating an automatic pilot control of the thermo-magnetic type in conjunction with the thermostat for automatic temperature control. Positive cut-off instruments assure 100% shut-off of gas to both the pilot burners and main burners in case of pilot failure. The four one-piece cast iron burners that are standard on this model have raised ports to assure equal heat distribution.

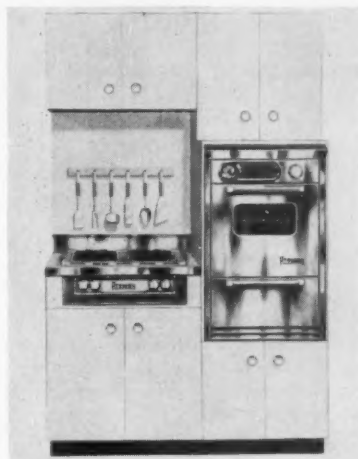
Two reheat-per-hour capacities per hour are possible with this model. At 60° rise, 33.6 gallon recovery is possible with two burners and one control; reheat totals 56 gallons with four burners and two controls operating. Respective reheat capacities per hour at 100° rise are 67.2 and 112 gallons. Burner input ratings with the two burners on is 40,000; with four burners, 80,000.

Construction: Owens-Corning Fibreglas insulation, Dupont Dulux exterior finish are featured. The boost-

er is equipped with either Robertshaw-Grayson or General thermostat controls. An exclusive feature is the hand hole cleanout. Models are available with either gold or chrome trim.

Republic Heater Division

Circle 9 on Readers' Service Card



Built-in cooking units

These units can be moved like building blocks from one home to another or they can be combined with already existing cabinets to form a permanent cabinet installation.

Model: Modular Cooking Centers

Description: Available in stainless steel and white enamel combinations, the Preway Modulares are designed to accommodate the line of Preway Bilt-Ins and provide a fast, easy, economical method of remodeling an older home or an apartment.

Preway Inc.

Circle 10 on Readers' Service Card

Portable space heater



A new portable space heater, operated on L. P. gas, has been added to the line of gas burning equipment manufactured by the Johnson Gas Appliance Co.

Purpose:

Weighing only 38 lb. and easily moved from place to place, the heater can be used in any ventilated space. It has been designed to give a balance between radiant and circulated heat to prevent hot spots on ceiling or floor. Double

baffles at the bottom of the heater also help keep the floor cool.

Description: The heater is shipped from the factory completely assembled and ready to light. It only needs to be connected to a ¾-in. copper tube and flare fitting. Eighteen inches in diameter and 27 in. high, the unit has a capacity of 10,000 to 63,000 Btus. There are no gas or air adjustments necessary and heat is controlled by turning the burner to the desired warmth.

The 1330 Johnson Portable space heater is available only with Robertshaw AGA approved 100% safety shutoff and pilot.

Johnson Gas Appliance Co.

Circle 11 on Readers' Service Card

Domestic range

Production of a new line of low-cost gas ranges is underway as the Wedgewood major appliance division of Rheem Manufacturing Co. introduces four models. **Model:** "Rheem Royal."

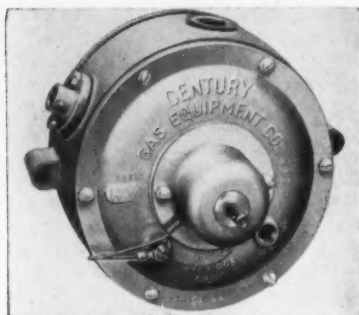
Description: The line is designed for multiple dwelling owners and builders and to meet the increasing demand for a quality range at a low price. The Rheem Royal will be available in one 20-in., one 30-in. and two 36-in. titanium porcelain-enameled models.

Construction: All models are equipped with decorator-grey porcelain enamel burner grates and automatic top burner lighting as standard equipment. Oven size is 16 in. by 20 ¾ in. deep. The ranges are fully insulated with fibreglas and are porcelain enameled throughout. One model, the R-281, is equipped with a chrome-plated steel griddle with temperature indicator and mirror for viewing flame.

Rheem Manufacturing Co.

Circle 12 on Readers' Service Card





Converter

A new, small converter, or heat exchanger regulator, developed especially for farm tractors and industrial trucks of 100 hp or less, is announced by Century Gas Equipment Co.

Description: This two-stage converter features a built-in atmospheric lockoff and cast-in passages for gas and water. It is available with a solenoid primer.

Small and compact in size (5¼-in. diameter by 3-in. depth), it weighs only 3 lb. All parts are readily accessible for quick overhaul without removal from engine mounting. The water, gas and mounting bosses are arranged for ease of installation on the most difficult conversions.

Construction: Precision built of aluminum alloy, it is non-corroding, and has a pressure relief back gasket, which eliminates damage due to freezing in winter weather.

Century Gas Equipment Co.

Circle 13 on Readers' Service Card

Tractor

Model: McCormick Farmall 300 L. P. gas.

International Harvester Co.'s new full three-plow L. P. gas tractor develops about the same power as the Farmall 300 with gasoline engine, which was officially tested at 39.84 belt, and 35.87 drawbar horsepower.

Purpose: The Farmall 300 LP gas tractor is designed specifically for maximum efficiency and performance from liquefied petroleum fuels. Features include higher, compression ratio, 12-volt electrical system, micronic-type fuel filter, Ensign carburetor and regulator-vaporizer, and a completely sealed fuel system with special tank and controls. The tractor is fully protected by safety and excess-flow valves, and conforms to all safety codes.

International Harvester Co.

Circle 14 on Readers' Service Card

TRADE LITERATURE

Hose assembly catalog

Anchor catalog No. 100 presents a wide range of factory assembled high, medium and low pressure hose assemblies for hydraulic, suction return and general applications.

Many exclusive features including the Anchor Max-Flo couplings are described. Also included are flow formation, methods for computing length of hose assemblies, etc.

Anchor Coupling Co. Inc.

Circle 15 on Readers' Service Card

Colored controls folder

Automatic controls in custom color can make a new water heater "a thing of beauty" in the home, according to General Controls Co., which has just released a new brochure, "Color in Controls."

The brochure is complete with color chart and offers the new line of water heater controls, with either gold or chrome dials, in a wide variety of decorator hues.

General Controls

Circle 16 on Readers' Service Card

Carburetion catalog

Ensign offers a completely new colored, fully illustrated catalog covering its complete line of liquefied petroleum gas carburetion equipment. This catalog, known as Manual No. 108, covers the entire subject from behavior characteristics of the fuel to its utilization as an internal combustion engine fuel.

Diagrams and tables, sectional views, etc., are included in this new catalog. L. P. gas dealers may obtain a copy of this new Ensign brochure by writing for it.

Ensign Carburetor Co.

Circle 17 on Readers' Service Card

Customer service booklet

A proved system for handling customer service, truck routings, and invoice accountings, for L. P. gas, gas, electric, and water companies is outlined in a 10-page illustrated brochure recently released by Remington Rand. The methods described, developed in cooperation with 300 public utility and L. P. gas com-

panies, afford faster handling of customer requests, improved customer-employee relations, and lower operating costs both in the office and in the field.

Remington Rand

Circle 18 on Readers' Service Card

"Little Elpee" catalog

As a part of its continuing promotional program for L. P. gas distributors and dealers, the Rego division of the Bastian-Blessing Co. has just released a catalog supplement showing the new newspaper mats available in its "Little Elpee" cartoon strip.

Designed for use in local LPG advertising campaigns, the Little Elpee cartoons—featuring the winsome elfin trade mark of the same name—are said to be of far-reaching importance in promoting the widening use of L. P. gas.

The Bastian-Blessing Co.

Circle 19 on Readers' Service Card

Poultry equipment catalog

Hundreds of new types and sizes of money-making equipment for poultry and pork producers are profusely illustrated and described in Oakes new catalog No. 60 now ready for distribution.

This new 52-page annual, attractively printed in three colors, presents the latest time- and labor-saving devices for the ultimate benefit of poultry and hog raisers.

The Oakes Manufacturing Co.

Circle 20 on Readers' Service Card

Heat treating bulletin

A new technical bulletin describing furnaces for the heating and heat treatment of aluminum and other light metal alloys from the ingot to the finished product has just been issued by Surface Combustion Corp.

This bulletin covers all types of furnaces, both batch and continuous, including soaking pits, coil annealers, continuous process roller hearth furnaces, batch type units for heat treating, and melting, as well as investment casting.

Surface Combustion Corp.

Circle 21 on Readers' Service Card

FOR MORE INFORMATION

about New Products in this issue . . .

use these time-saving

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February 1956

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First Class Permit No. 6955, Sec. 34.9 P. L. & R., Los Angeles, California

BUTANE-PROPANE NEWS
198 SOUTH ALVARADO ST.
LOS ANGELES 57, CALIF.

KEEP UP WITH WHAT'S NEW

in Products, Literature and Service

use these time-saving

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BUTANE-PROPANE NEWS

198 SOUTH ALVARADO ST.

LOS ANGELES 57, CALIF.

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CITY & STATE _____

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Continued from page 84

advantage of being cleaner than fuel oil.

"Air-conditioning is one of the newer promising uses of L. P. gas," Mr. Singreen continued. "In even faster growing volume, L. P. gas is going into tractors, trucks, buses, fork-lift trucks, irrigation machinery, weed burners, sugar field burners, and other equipment.

"Recognizing the growth of L. P. gas," Mr. Singreen concluded, "a number of major oil companies have recently stepped directly into the market of bottled gas, instead of disposing of their production through brokers and distributors as in the past."—From *The Louisiana Insuror*.

Tesco Inc. occupies new headquarters in Tulsa

According to Sheldon Miller, president, Tesco Inc. has moved into its newly completed facilities in Tulsa that offer 12,000 sq ft of floor space.

The new building makes possible more extensive research and testing for the firm's stock tank heater, and offers space for future expansion when needed. In the new headquarters, Tesco will continue manufacturing the stock tank heater, space heaters, vent caps, gas plates, and other products.

Although the recent move included some additions in personnel, the executive staff remains the same.

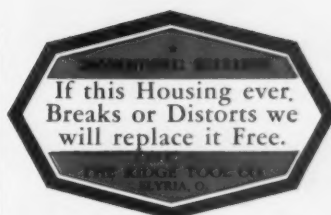
Personnel assignments announced by Pyrofax

In line with its expanding operations, Pyrofax Gas Corp., New York, has announced several changes in the field as well as in the New York and Long Island City offices.

A new south Florida district has been formed, headed by Frank B. Collier as district field manager. A 25-year LPG veteran, Mr. Collier has served as sales manager for a distributor, district field manager in New York, and division manager of the Allegheny division.

Succeeding him as Allegheny division field manager is LeRoy E. Mosher, who has been district field manager in Illinois since 1950. R. E. Gottenborg is now district field manager for the central and western Illinois, northeastern Missouri, and southeastern Iowa district. J. D. Broome has joined Pyrofax as district field manager for central and northern Georgia.

Ronald L. Gatto, who has been with the company since 1946, has been promoted to office manager of



Even *without*
this famous guarantee

Genuine **RIDGID** would still be the World's Most Popular Pipe Wrench



...and
no wonder—
millions of
users know it
out-performs,
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It's the "RIDGID" name that guarantees you everything you want in a pipe wrench — instant bite on the pipe, instant let-go — it can't lock, assured by patented hookjaw suspension . . . handy pipe scale, easy-spin adjusting nut, comfort-grip I-beam handle . . . and every one factory-tested before shipment!

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The Ridge Tool Company

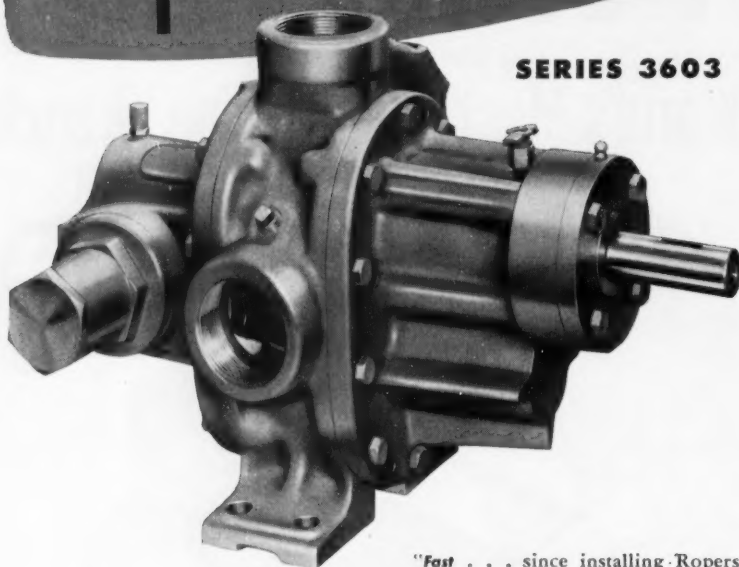
• Elyria, Ohio, U.S.A.

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BETTER SERVICE LIFE**

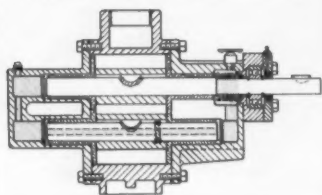
ROPER

**L-P
PUMPS**

SERIES 3603



QUICK, POSITIVE MAINTENANCE



**ROPER SINGLE-POINT
PRESSURE-LUBE SYSTEM**

Complete lubrication of main bearing is assured through Roper single-point pressure-lube system. This simplified lubricating method saves time, effort, and material . . . eliminates fuss and bother.

**TANK TRUCK AND BULK PLANT PUMPS
FOR 30, 50, AND 100 G.P.M. DELIVERY SYSTEMS**

GEO. D. ROPER CORPORATION
352 BLACKHAWK PARK AVENUE
ROCKFORD, ILLINOIS

ROPER
Rotary Pumps

"Fast . . . since installing Ropers, deliveries have been speeded up to take care of more calls per day."

"Quiet . . . customers aren't bothered by annoying noise with Ropers . . . we can even make night deliveries without disturbing anyone."

"Economical . . . our Roper 30 G.P.M. units reach rated capacity quickly at medium idle . . . no racing the motor to get results!" These are the reports of L-P marketers who *know*, for Ropers give them *better service* day in and day out.

If you want to effect greater economies and more profitable delivery like others, look to Roper for the answer to L-P Gas pumping needs. Ask your distributor for more facts and performance data, or write for Bulletin No. 24 which outlines capacities, features and specifications.

the Long Island City office. Other appointments include Edward P. Hanak, who has transferred to the company's accounting and finance department, where he will be responsible for the system tank and meter phase of the bulk program, and Charles Biddle, who has recently joined the company and will assist in developing the bulk gas program.

Home laundry appliance sales continue increase

Factory sales of home laundry appliances during November totaled 525,748 units, a 16% increase over November a year ago, according to Guenther Baumgart, executive director of the American Home Laundry Manufacturers' Association.

Cumulative sales for the first 11 months amounted to 5,179,940 units, 27% above the corresponding 1954 period. Thus, November monthly sales continued to hold the unusually high increase registered by the industry during 1955, he said.

Automatic gas clothes dryers for the month showed the greatest increase over November 1954 sales, up 37%. Electric dryer sales were up 5%. Total dryer sales for the month amounted to 157,153 units, and showed a 56% increase for the 11 months as compared with the corresponding 1954 period.

Kengas acquires two more Kentucky operations

Two L. P. gas companies, both operating out of Madisonville, Ky., have been purchased by the Kengas division of Western Kentucky Gas.

The companies are Blue Flame Gas Co. and Laffoon Bottled Gas Co.

The expanding LPG operation is under the direction of J. L. Fietz, general manager, with L. R. Gimmell, Paducah; Wayne Doran, Murray; David Rose, Marion; Howard Dason, Henderson; John Laffoon, Madisonville, and Arthur Cornell, Owensboro, as local managers.

Spot radio commercials available from Ruud

Recorded radio commercials of network quality are being made available by Ruud Manufacturing Co., Kalamazoo, Mich., for local retailers to promote the sale of the Ruud Alcoa Alloy gas water heater on their local radio stations.

During time provided at the end of each commercial, the local announcer can tie in the name and address of the local sponsor.

BUTANE-PROPANE News



This key can open the door to greater LP-Gas sales...

Here are three good reasons why it will pay you to buy Gulftane LP-Gas:

1 High quality—Gulftane is produced in plants of the latest design under accurately controlled conditions to specifications that meet the highest standards adopted by the LP-gas industry. It is free of moisture, gum, tar, dust, dirt, and sulphur. Or, to put it another way, Gulftane is the same high quality as Super-Refined No-Nox Gasoline and the other well-known products that carry the familiar Orange Disc trade mark.

2 Dependable supply — many natural gasoline plants and refineries, plus adequate storage, assure reliable, continuous supply.

3 Prompt delivery service—modern Gulftane producing plants strategically located throughout Gulf's wide-spread marketing territory,

along with a fleet of new tank cars, assure prompt, efficient delivery service.

Also ready to serve you is Gulf's experienced engineering and marketing personnel. Get all the facts concerning Gulftane service—contact your local Gulf District Office or your nearest Gulf Division Sales Office (see addresses below).

131 Ponce De Leon Avenue
Atlanta, Ga.

31 St. James Avenue
Boston 17, Mass.

Gulf Building
Houston 2, Texas

127 Elk Place
New Orleans 13, La.

17 Battery Place
New York 4, N. Y.

1515 Locust Street
Philadelphia 2, Pa.

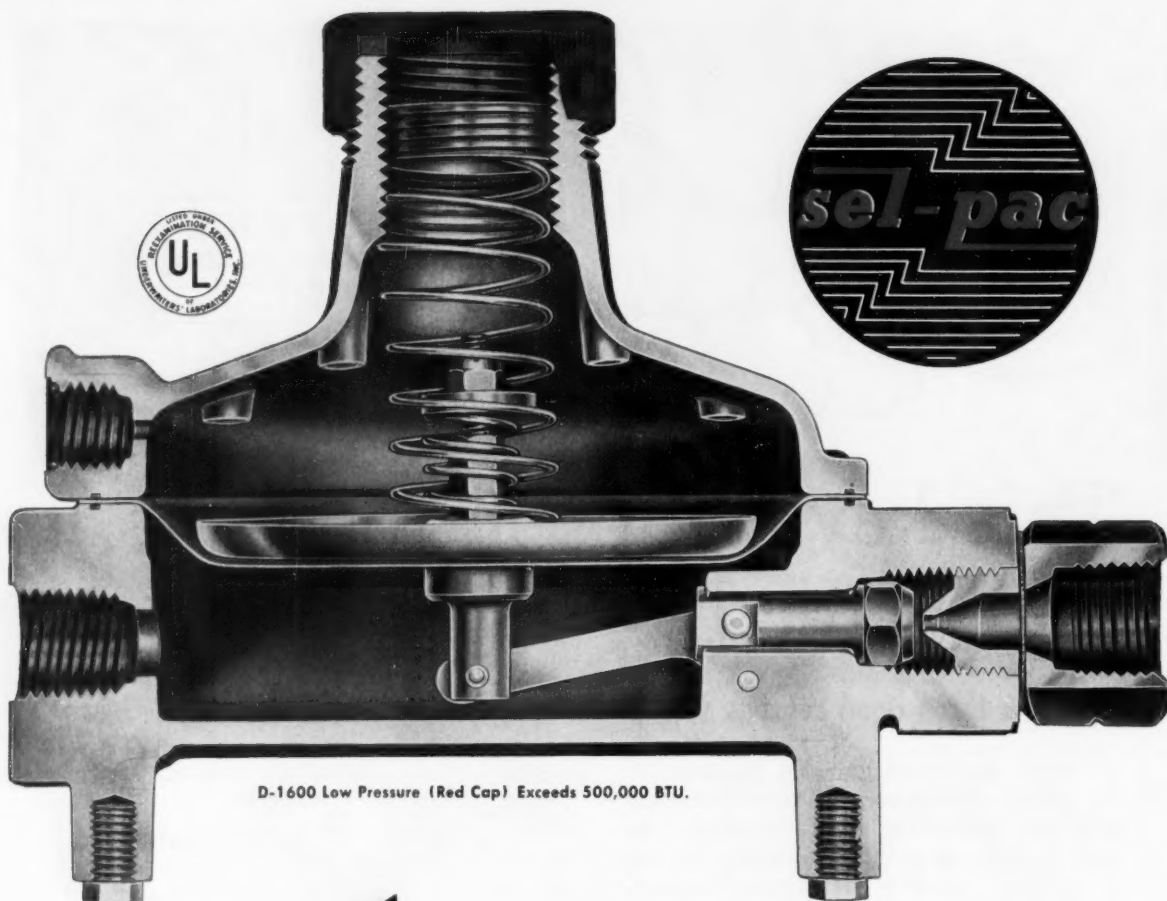
National Bank Building
Toledo 1, Ohio

P. O. Box 1679
Denver 1, Colo.
(Zone Office)

230 No. Michigan Ave.
Chicago 1, Ill.
(Zone Office)

GULF OIL CORPORATION
GULF REFINING COMPANY
1822 Gulf Building, Pittsburgh 30, Pa.





D-1600 Low Pressure (Red Cap) Exceeds 500,000 BTU.

1st IN REGULATOR PERFORMANCE



D-1600 HP High Pressure (Red Body) Exceeds 2,500,000 BTU Under Extreme Winter Conditions.



D-1610 Recommended for 500 to 1000 Gallon Tanks. Exceeds 1,125,000 BTU At Ten Pounds Inlet Pressure.

These Sel-Pac Regulators will accommodate practically all LP-Gas load requirements including single and two stage systems — bottle or bulk. Similar in design simplicity, with many parts interchangeable, reduces dealers' inventory and handling costs. High in capacity with extra large orifices, especially designed to prevent freeze-ups, saves you hundreds of dollars in service calls. All Sel-Pac Regulators are rugged in construction and incorporate heavy wrench bosses to aid installation.

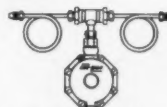
FIRST in performance and LOWEST in price per cubic foot of capacity you will be time and money ahead to specify Sel-Pac. Complete regulator application data are yours for the asking. No obligation, of course.



D-250 Assembly



D-251 Assembly



D-255 Assembly



SELWYN-PACIFIC COMPANY

340 West Avenue 26 • Los Angeles 31, California • Capital 5-1555





WINTER FREEZE-UPS NEED NOT OCCUR

by **GEORGE R. POSTLEWAIT**
President
SELWYN-PACIFIC COMPANY

Many Service Calls are blamed on regulators for which they are not responsible. Many could be avoided by a little common sense. We often hear, "The Regulator froze up and shut off the gas". *Regulators don't freeze up.* Water in systems can freeze and cause trouble. So (1) Be sure your gas is free of moisture when received. (2) Be sure all hoses, fittings handling equipment, tanks, etc. have been properly dried before LP-Gas reaches them. (3) Be sure all regulators are sufficiently protected from the weather to prevent water from collecting, thus interfering with proper operation.

Knowing that you will not be 100% successful in keeping all moisture out of systems, the following service tips will help minimize freezeups. (1) Use 2 stages of regulation. (2) Be sure the pigtail leading from the valve to the regulator slopes upward to the regulator inlet. Then, if moisture vapor condenses in the colder pigtail, it drains back into the tank. (Low points in the pigtail can become water traps and when the water freezes, it blocks the line carrying gas to the regulator. (3) Use larger diameter pigtails which have more cross sectional area and are harder to "freeze shut". (4) Use large orifice regulators since they don't ice up as quickly as small orifices. (5) Keep all valves and openings closed on empty LP-containers. This prevents breathing with resultant condensing of moisture inside container. (6) Properly purge all new tanks and cylinders before charging.

In using 2 stage regulation (1) Use regulators which have no low points or water traps around the seat of the high pressure regulator inlet. Trapped water forms ice and prevents operation of regulator. (2) Use a large diaphragm linkage type 1st stage regulator to insure high capacity and low lockups. (High lockups on 1st stage can cause trouble in winter operation) (3) Don't set the delivery pressure too high. This permits recondensation of liquid which can't be handled by the second stage regulator. (A regulator with a 20 P.S.I. Lockup would permit the vapor in the line leading to the second stage regulator to liquify at -5°F . A regulator with a 5 P.S.I. lockup would permit a -20°F temperature before liquifying) (4) Use properly sized lines on all installations.

Know your product and its characteristics! Good sense saves good dollars!

SELWYN-PACIFIC COMPANY
340 West Avenue 26
Los Angeles 31, California

CALENDAR

Coming events
in the Industry

February 16-17 — Eastern Canadian LPGA Convention — Mount Royal Hotel, Montreal, Quebec.

February 21-23 — L. P. Gas Management School — University of Wisconsin, Madison.

February 28-29-March 1—LPGA District convention and Trade show, Sheraton-Park hotel, Washington, D. C.

March 4-6 — Indiana LPGA Convention and Trade Show — Claypool Hotel, Indianapolis.

March 26-28 — Southeastern District LPGA convention and trade show, Atlanta-Baltimore hotel, Atlanta.

April 5—GAMA 7th Annual Atomic Gas Range conference, Hotel Pierre, New York City.

April 6-7—Northwest District LPGA Annual Convention — Multnomah Hotel, Portland, Oregon.

April 23-24 — Montana LPGA Annual Meeting, Northern Hotel, Billings.

April 23-25—Association of Nebraska LPG Dealers, annual state convention, Fontenelle hotel, Omaha.

April 28—Nevada Liquefied Gas Dealers Spring Meeting, Ely, Nev.

May 6-9—LPGA 25th annual convention and trade show, Conrad Hilton hotel, Chicago.

June 4-June 29 — Short Course in Gas Technology — North Carolina State College, Raleigh.

June 10-12—Arkansas LP Gas Association Annual Convention — Arlington Hotel, Hot Springs, Ark.

July 9-August 4 — Short Course in Gas Technology (2nd section) — North Carolina State College, Raleigh.

All associations are invited to send in dates of their forthcoming meetings for this calendar.

Joseph Zoff Increases Furnace Sales 152% By Adding Herbster Line

Joe Zoff, owner of Zoff's Equipment Company, Akron, Ohio, has increased furnace sales 152% since adding the Herbster line. "Herbster gave me something to sell beside price," reports Mr. Zoff. "We used to do a lot of bidding on a competitive price basis. However, when we took on the Herbster line, they gave us the necessary selling aids to explain the tremendous advantages of Herbster's lifetime furnaces—for example the difference between a Herbster cast iron heat ex-



changer and an ordinary cheap steel exchanger. When our prospects realized that Herbster furnace had an absolutely safe exchanger that would never burn out, rust out or buckle, our job was done. They weren't satisfied with any other furnace—no matter how cheap it was. Thanks to Herbster, I make a decent profit on every furnace sale."

You, too, can increase sales and profits by handling the Herbster line. We'll be glad to tell you about the selling aids that helped Mr. Zoff. Mail coupon for complete details.

Distributors & Dealers Wanted!

HERBSTER FURNACE COMPANY

877 Addison Road, Cleveland 3, Ohio

Herbster still has a limited number of openings for distributors, agents and dealers. Please fill out this coupon.

Name

Company

Address

City State

Agent ☐ Distributor ☐ Dealer ☐

**The Furnace with something
to sell BESIDES PRICE!**

Danger from overfilled cylinders

L. E. Davis, Chief Engineer, Pan-American Fire & Casualty Co.

OVERFILLING cylinders is a dangerous practice and can lead to serious accidents. I recently saw it result in death.

It happened in a trailer camp,

where an overfilled ICC cylinder had brought death to one person and seriously burned another. The accident had a side result, too: it deeply impressed the occupants of some 60

other trailers in the camp, all of whom wondered whether they too might not be exposed to a similar hazard.

It may be that dealers need reminding on occasion. Or maybe their employees do. Surely each employee should be made aware of the perils of overfilled cylinders.

On every ICC cylinder the tare weight and water capacity in pounds are shown. When a cylinder is filled with propane, the law sets a limit on the quantity of propane by weight that can be put into it. This weight can be no greater than 42% of the water capacity in pounds. Thus a small cylinder such as is used on most mobile homes is known as a 20-lb cylinder because, although the water capacity is shown on the cylinder as 48 lbs, only 42% of this weight in propane can be put into it.

Water weighs 8.33 lbs per gallon, propane 4.23.

Dangerous overfilling

Even slight overfilling is dangerous and should be guarded against by careful filling according to weight restrictions. Let's consider what happens to the liquid when a cylinder is filled to certain weight levels.

A cylinder standing in the sun can reach a temperature of 130°F although the atmospheric temperature is only 90°. Such a rise in temperature causes the liquid gas within the cylinder to expand considerably. If filled to a proper level at 60°F, the container will be nearly filled when the liquid has expanded at 130°.

If overfilled by 5% at 60°F, a cylinder will be liquid full at approximately 109°.

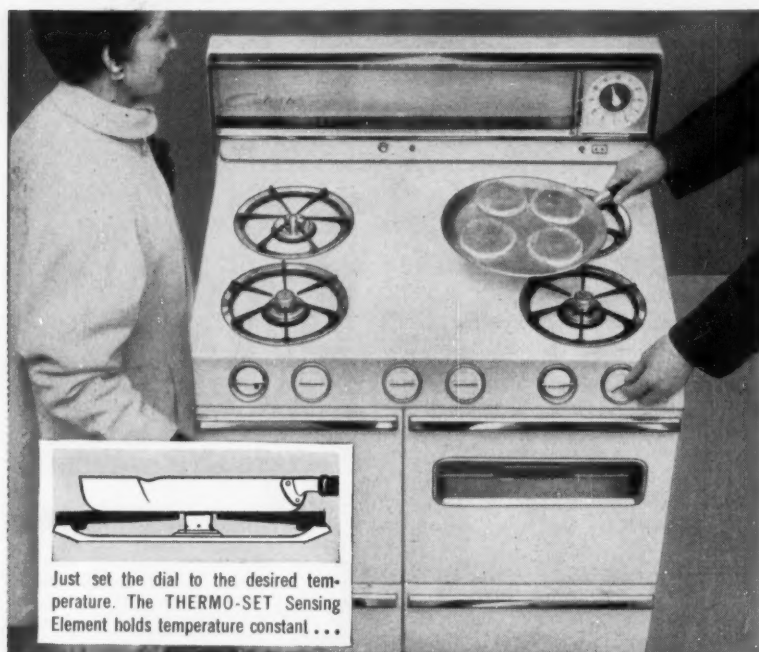
If overfilled by 10% at 60°, a cylinder will be liquid full at 85°.

Liquid full

If overfilled by 15% at 60°, a cylinder will be almost liquid full at this temperature. In other words, it will contain about the same amount of liquid as a cylinder filled to the proper level and then subjected to a temperature of 130°F.

When a cylinder is filled with the proper weight of L. P. gas, the actual temperature is not important because the weight of the liquid in a cylinder filled to the proper level at 60°F is the same as the weight of this same amount of liquid after it has expanded as a result of a 130°F temperature. ■

Adapted from an article appearing in Alabama LP-Gas News.



Just set the dial to the desired temperature. The THERMO-SET Sensing Element holds temperature constant...

Show the lady **THERMO-SET**
...and you're off on a Caloric Selling Spree

It's CALORIC'S exciting Thermostatically-controlled gas top-burner that holds temperature where it's set...automatically

Here's Caloric's most demonstrable feature yet! You can put this great sales-maker into action right before your customer's very eyes.

Just connect your range to gas, turn the top burner dial and get set for sales! Show her delectable eggs with-

out burning, bacon with no smoke or spatter, golden-brown fried foods, not soggy or greasy. With Caloric THERMO-SET it's goodbye to guesswork. No more burning, scorching, boilovers! No more endless watching. Just demonstrate it and you'll sell it.

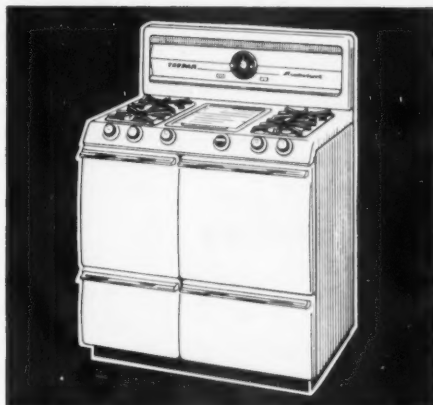
Caloric

Caloric Appliance Corporation • Topton, Pa.

**RANGES,
DRYERS,
BUILT-IN
RANGES,
DISPOSERS**



The 40" **GREENBRIER**. Every modern feature in one magnificent LP range. Four-in-line burners, Adjust-to-height broiler. A real money-maker.



The 36" **MEADOWBROOK SERIES**. Famous Tappan Griddle-in-the-middle and Line-Of-Sight Valve Panel. Terrific sales appeal!



The 30" **HOLIDAY SERIES**. Huge oven cooks a complete banquet-size meal, yet whole range is just 30 inches wide.

Reach more Customers with a wider choice of ranges from **TAPPAN** the LP dealer's best friend!

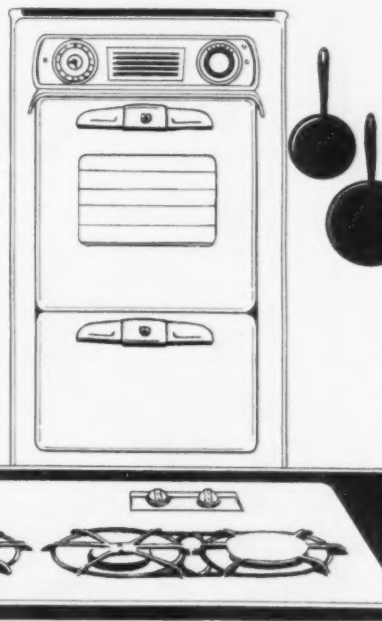
There's more money for you in the Tappan line of LP Ranges . . . because more of your customers will find just what they want with Tappan. Complete choice of models and sizes. *Built-ins*, too! Besides deluxe models, Tappan has fine ranges in the low priced bracket for your budget-minded customers. And you get top advertising . . . top merchandising help from Tappan.



The 40" **SUPER SIXTY SERIES**. Famous Divided Top. High center oven. Just loaded with wanted features. Proven best seller.

Go
all the way
with *built-ins*
as well as
free standing
ranges!

TAPPAN BUILT-IN LP GAS RANGES. Oven and broiler units fit any kitchen plan. Surface units "drop-in" . . . avoid costly installation for your customers.



THE TAPPAN STOVE COMPANY, Mansfield, Ohio
For current Tappan LP Sales and Promotion Plans, write
Dept. BN-26, The Tappan Stove Company, Mansfield, O.



ASSOCIATIONS

AHLMA reports \$1.5 billion sales as best in history

The 40th annual meeting of the American Home Laundry Manufacturers' Association was held Jan. 7 in the Red Lacquer room of the Palmer House, Chicago, according to Ray G. Halvorsen, chairman of the 40th annual meeting committee and executive vice president, Hamilton Manufacturing Co.

Opening the meeting was President W. Homer Reeve, who reported on the home laundry industry's accomplishments. This was especially significant, as the home laundry appliance industry has just completed its greatest sales and production year in history, with sales amounting to more than \$1.5 billion during 1955.

New association officers were elected, the treasurer made his report, and AHLMA's general counsel spoke on "Trade Associations in the Competitive Scene."

Lyman C. Conger, chairman, man-

agement committee, Kohler of Kohler, Kohler, Wis., spoke on "Flight From Judgment" at the group's luncheon.

The afternoon session included reports from various committee chairmen, and a discussion of the steel situation for the industry by R. M. Buddington, general manager of sales, Inland Steel Co.

The 40th annual birthday ball for members and guests was held in the Red Lacquer room in the evening.

New Yorkers gather for Albany convention

Delegates to the January convention of the New York State L. P. Gas Association were present at an interesting program highlighted by an address from Lysander T. White, manager of business research and education for Cities Service Oil Co. The meeting was held at the Dewitt Clinton hotel in Albany, N. Y.

In addition, LPGA President Mc-

Allister reported on Operation Cue, Ellwood Treisbach of the John Wood Co. presented a film, "Servants on Tap"; and a live demonstration of automatic top burner controls for gas ranges was presented by M. B. Gault of Robertshaw Thermostat division, Robertshaw-Fulton Controls Co. Social events included a friendship hour, banquet and Broadway show.

Newly elected officers are Harry V. Smith, president; Roy R. Johnson, 1st vice president; Charles F. Scott, 2nd vice president; Emerson C. Underwood, secretary, and Jack P. Neumann, treasurer.

LPGA to celebrate 25th anniversary May 6-9

The Liquefied Petroleum Gas Association's annual convention May 6-9 will be a 25th birthday party—celebrating the silver anniversary of the national organization of L. P. gas marketers and suppliers. The meeting and trade show will be staged at Chicago's Conrad Hilton hotel.

The association's past presidents will be honored during the session, according to C. O. Russell, Rapid Thermogas Co., Des Moines, Iowa, convention chairman. All the former leaders are still active in the associa-

*All of
these
Shares
have
been sold*

75,000 Shares Woodrow Douglas Oil Company

(Pecos, Texas)

Common Stock

(Par Value \$1 Per Share)

OFFERING PRICE: \$4 Per Share

Eisele & King, Libaire, Stout & Co.

Established 1868

Members of New York Stock Exchange

Members of American Stock Exchange (Assoc.)

50 Broadway

New York 4, N. Y.

Please send me a copy of the Offering Circular relating to Woodrow Douglas Oil Company.

Name _____

Address _____

the LMC Money Maker



*is on the road to setting
new records in dealer profits*

The LMC Money Maker with its increased capacity of 7500 to 8000 gallons with 250 lb. W.P. allows high payloads with a low tractor and trailer investment.

The neckdown design gives you a low center of gravity, higher road speeds and more gallons in your storage tank when you need them. Whatever your LP Gas transport problem, you'll find this unit is a Money Maker for you.

In states with higher legal weight limits, our 9000-plus gallon neck-down unit may be your best buy.



Buy on the LMC budget plan!

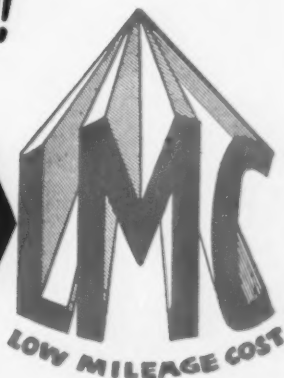
WRITE FOR ADDITIONAL INFORMATION, PRICES AND PAYLOADS

LUBBOCK MACHINE & SUPPLY CO

P. O. DRAWER 1589

Porter 2-5261

LUBBOCK, TEXAS



tion and in their own businesses. The group to be honored includes the first president, Mark Anton of New Jersey, who presided over the first meeting in 1931 when the organization was known as the National Bottled Gas Association. Later the name was changed to reflect the growing importance of bulk-delivered butane and propane.

The estimated 4000 conventioners will receive unique 25th birthday presents as part of the celebration.

Already 236 booths for the annual trade show have been sold out of the 240 spaces available. Displays will show new appliances and equipment items and will crowd all of the Conrad Hilton's exhibit facilities.

Business sessions will be held on two of the four days and will present leading national business figures and L. P. gas industry speakers.

The convention will close with a banquet and the 25th birthday edition of the Gas Flame Gaieties. A complimentary cocktail party will also be held for registrants.

Assisting Mr. Russell on the convention committee are: James C. Yeomans, The Multnomah Fuel Co.;

M. F. Van Horn, Van Horn Butane Service; H. M. Wright, Home Gas & Appliance Co.; E. J. Gustafson, Town & Country Gas Co.; J. Lee Laptad, Johnson County L. P. Gas Inc.; Forrest Fram, Fram Heating Inc.; Victor E. Lagrange, Home Gas & Fuel Co.; F. L. Fagan, Gem Automatic Gas Co. Inc.; A. C. Horner, A. C. Horner Inc.; Norman W. Bangs, Community Gas Co. Inc.; Duncan Ferguson, National Propane Co.; D. R. McRae, Rockgas Propane Ltd.; Marlo Vela, Daniel Vela, S.A.; E. S. Kleinmann, Dearborn Stove Co.; Robert Miller, The Weatherhead Co.; C. J. Bender, Trinity Steel Co. Inc.

Minnesota service school scheduled for March

The eighth annual Liquefied Petroleum Gas Service School will be held at the University of Minnesota Farm campus on March 19-21, according to E. A. Dovenberg, president of the Minnesota Petroleum Gas Association.

Joe Nelson, of Delta Tank, is chairman of the educational committee of MPGA that is arranging the school.

Montreal to be scene of Eastern Canadian meeting

Montreal is once again the scene of the annual convention of the Eastern Canadian district, Liquefied Petroleum Gas Association, as propane operators from Canada converge on the Sheraton-Mt. Royal hotel for a two-day review of the most prosperous year in the industry's history on Feb. 16-17.

Delegates will hear C. J. McAllister, national LPGA president, describe the remarkable success of L. P. gas installations in surviving the Nevada atom bomb tests. Howard White, executive vice president of LPGA is also a featured speaker. His topic: "How to Measure the Future."

Measuring the industry's 1956 prospects will be H. L. Hill, of Sumner Propane, Moncton, N. B. Other speakers will include F. W. Taylor of Ascott Water Heaters, England, who is coming to Canada to address the convention and give lectures at a series of schools being sponsored by LPGA in eastern Canada.

Charles Corken, president, Corken Pumps & Compressors, Oklahoma City, will be present to give Cana-

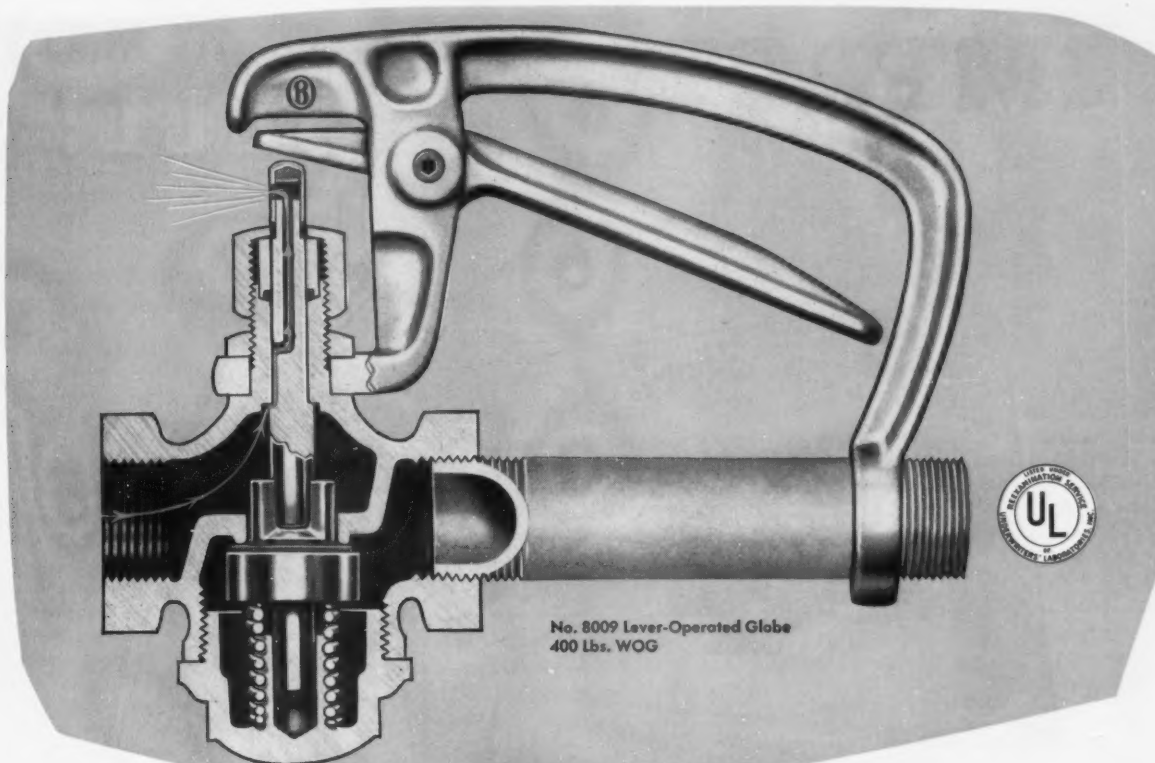
PRESSED PRODUCTS

... from our HEAD DEPARTMENT



HEADS IN STOCK READY TO SHIP

P. O. Box 5146 • Dallas, Texas • PProspect 2441



It's new!

An LP-Gas Valve with safeguard design — Listed by Underwriters Laboratories

Now you can have increased protection when transferring liquefied petroleum gas from tank to tank.

This lever-operated, bronze dispensing valve is especially designed for safe operation. It minimizes the hazard from gas trapped in the line after a tank is filled and the tank valve closed. Back pressure can escape in only one direction . . . away from the operator's hand. It goes through a special escape port in the stem of the dispensing valve.

Available in three sizes — 1/2, 3/4, 1-inch — the No. 8009 dispensing valve is listed by Underwriters' Laboratories.

In testing, it was still leaktight after 10,000 operations.

Companion line to the No. 8009 is the No. 8001 bronze globe valve. It has the sturdy outside bonnet design, features the slip-on disc holder to make disc changing a matter of only a few minutes. Available in sizes 1/8" through 3 inches, rated at 400 pounds water, oil, or gas pressure.

Both valves are made by a company that has been making quality bronze valves since 1888. For additional information, send in the coupon below.



No. 8001 Globe
400 Lbs. WOG
Slip-on Disc Holder

4688-V

O-B VALVES

GET THE DETAILS NOW!

Valve Department

OHIO BRASS COMPANY, MANSFIELD, OHIO

Please send bulletin 1345-V on O-B valves for LPG service, including the No. 8009 with safeguard design.

Name _____

Title _____

Company _____

Address _____

City _____

State _____

IMPACT

TO HELP YOU SELL!

ROPER Tem-Trol
CONTROLLED-HEAT TOP BURNER

Makes Any Utensil Automatic!

Think of it! Automatic cooking in any utensil, right on your range top... with heat control like that of your oven. It's so easy! Just "tune" the dial to the heat you want. Then "Tem-Trol" holds it. Foods cook just right... every time... "Personalized" to your family's taste. Geo. D. Roper Corporation, Rockford, Ill.

WIDEST CHOICE OF CONTROLLED TEMPERATURES

- High Heats For Frying or Other Super-Speed Jobs
- Low, Low Heats For Delicate Foods
- ... Cocoa without boil-over
- ... Custard without a double boiler

ROPER
"AMERICA'S FINEST GAS RANGE"

Fashioned by Flame
FAMED FOR FASHION

Roper brings delightful new gas range beauty to your kitchen. Modern, colorful, clean-lined. Roper "Fashion-Flamed" styling flatters any decor.

Only "Tem-Trol" Gives You All 3

- Wide-Range Heat Detector
- Super-Speed Burner
- "Keep-Warm" Burner

You get highly accurate temperature control... quick-on-on with start-up... exclusive low-heat settings.

WRITE FOR FREE FOLDER OR SEE YOUR ROPER RETAILER

Ask, Too, About ROPER "eRANGEable" Built-in Gas Cooking Units and ROPER "DRY-AIR" Gas Clothes Dryers

Powerful Roper consumer advertising is pre-selling for you in Better Homes and Gardens, McCall's, Better Living, Good Housekeeping, Town Journal, Farm Journal, and other leading magazines.



ROPER ADVERTISING HAMMERS HOME YOUR SALES MESSAGE

Potent consumer ads, like this, spearhead Roper's hard-hitting spring campaign. Tie in now. Order radio "spots," store displays, newspaper ads, direct mail pieces, other timely helps. Follow Roper's lead, and watch your profits soar. Get full details today. Don't wait.



**GEO. D. ROPER CORPORATION
ROCKFORD, ILLINOIS**

I want to tie in with Roper's spring campaign.
Rush me full details.

Firm Name _____

Your Name _____

Address _____

City _____

State _____

BP256

ROPER'S PLANNED PROGRAM to help you sell "TEM-TROL"



**Smash
Broadside**



**Radio
Spots**



**Direct
Mail**



**Store
Displays**



**Newspaper
Tie-in Ads**

GEO. D. ROPER CORPORATION • Rockford, Illinois

dian operators his company's approach to the always-topical problem of "A Little More Profit."

The entertainment side of the program contains two "surprise" guest speakers at luncheon on Feb. 16 and 17, and the cocktail party on the 16th sponsored by equipment manufacturers and suppliers in the industry.

Wisconsin directors endorse highway signs program

Reporting an excellent attendance, the Wisconsin L. P. gas Association met Dec. 7 for its winter meeting at the East Side Business Men's Building in Madison, Wis.

George V. Bortner, newly elected president, announced the Wisconsin directors' unanimous endorsement of the Unified Industry Highway Sign Program. Pledging their support to the program, the board adopted a resolution as follows: "Recognizing the value of effective outdoor advertising to promote the best interests of the gas industry as developed by Beals Advertising Co., the Wisconsin association resolves to endorse this program and recommends its use to members of the Wisconsin association."



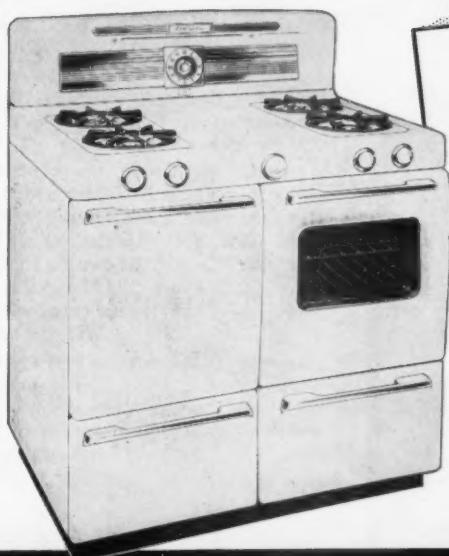
The Unified Industry Highway Sign Program was unanimously endorsed by the Wisconsin board of directors. Shown above (from left to right) are: (back row) Ralph Koeller, Andrews Oil Co.; J. E. Rigby, Phillips Petroleum Co.; George Bortner, Shell Oil Co.; Miles Barker, City Gas Service Inc.; LeRoy D. Weiland, Dearborn Stove Co.; Palmer E. Edwards, Ray Gluth, Dodd Gas & Appliance; Burie Eddings, Five Star Gas Co. (Front row) Don Verhelst Jr., Kool Kitchen Gas Co.; Larry Olsen, Suburban Propane Gas; W. S. Brenckle, Natural "LP-Gas" Corp., and Ralph M. Runge, Runge Gas Service.

One hundred fifty Wisconsin LPG dealers heard Vernon Beals review the "Oklahoma Story"* . . . the beginning of the program in which Oklahoma utilities and LPG dealers joined forces . . . and brought the group up-to-date with a resume of

the program's acceptance and spread in various states. At present 55 signs are on contract for location in southern Illinois and Wisconsin.

*See "Utilities, LPG Dealers Team Up to Promote Gas," October 1955 *Butane-Propane News*.

PROFITS PLUS with the Complete Range Line...



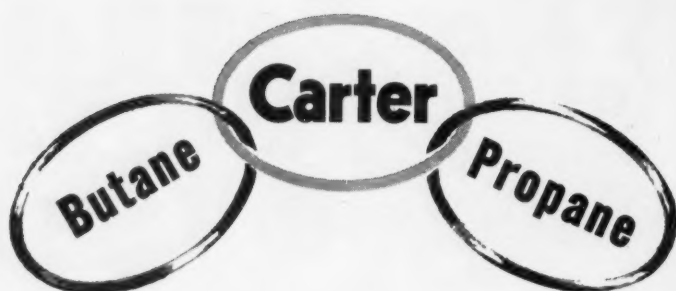
Enterprise



DEALERS . . . the Enterprise range line is built with you in mind. For each dealer handling Enterprise, the complete range line, there is profits plus. Because of the completeness of the Enterprise range line, the scope of your market broadens. Thus, you close sales you otherwise would have missed. There is an Enterprise range available to you to fit every kitchen need.

CALL • WRITE OR WIRE •

PHILLIPS & BUTTORFF MFG. COMPANY
NASHVILLE • TENNESSEE • Established 1858



it's natural to link LPG with Carter

In the LPG industry, CARTER and unexcelled products are naturally associated. And there's a simple reason for it: CARTER'S LPG products are unexcelled . . . the result of more than twenty years' experience in the manufacture of highest quality butane and propane. This experience — gained by men interested in only the best — is yours when you buy LPG from CARTER.

THE CARTER OIL COMPANY
TULSA, OKLAHOMA

Here's why you get RESULTS from B-P News Classified Ads

Your classified ad in B-P News will be seen in 9,013 different LPG plants . . . the *only* complete coverage of your major market in the LPG industry.

Deadline for copy is the 5th of every month preceding publication month.

Best evidence of results is the fact that for 17 consecutive years, advertisers have placed more advertising in B-P News than in any other LPG media.

BUTANE-PROPANE News
198 South Alvarado St., Los Angeles 57



the trade

Phillips is Delta chairman; Gayle is elected president

Kenneth H. Gayle Jr., former president of Ingalls Iron Works Co., Birmingham, Ala., has been elected president of Delta Tank Manufacturing Co., Inc.

Hal S. Phillips, president of Delta since 1946, has been elected chairman of the board of the Baton Rouge firm, a wholly owned subsidiary of General Gas Corporation. He will continue to serve as treasurer of General Gas.



K. H. Gayle



H. S. Phillips

Delta Tank

Mr. Gayle served as president of Ingalls Iron from 1951 through September 1955. He joined Ingalls' engineering and sales department in Birmingham in 1923 after a year with the American Bridge Co.

In 1925, Mr. Gayle was named Ingall's New Orleans district manager and two years later established Ingalls' New York district office. He was instrumental in opening Ingall's Verona, Pa. plant in 1930 and in 1931 was reassigned to the firm's New York office as District Manager.

In 1939, Mr. Gayle was named sales manager of Ingall's northern division with headquarters in New York and was elected a vice president of the company in 1945. He became president of Ingalls in September 1951.

Cassidy to head appliance quality control at Servel

Edward J. Cassidy, who has held top engineering, manufacturing and general management positions with

**TWO
SWITCHES**

BOTH

*Automatic
Recycling*



ELECTRICAL RATINGS
 8 Amp. at 115 V, AC
 4 Amp. at 230 V, AC
 .06 Amp. at 230 V, DC
 Motor Ratings: 1/4 HP, 115/230 V, AC

● These Baso switches recycle automatically when a normal pilot flame is established. Service calls are fewer because when low pressure or other causes affect the pilot flame below a safe lighting condition, the switch breaks the circuit to the automatic gas valve and will automatically reclose the circuit, only when a normal pilot flame is restored. If the pilot burner goes out completely, the switch breaks the main valve circuit until the pilot burner is relighted.

Think of the headaches this will save you and your customers. Automatic recycling—fewer service calls. This with the Baso Automatic recycling switches, No. 860 for two-wire circuits and No. 861 for three-wire circuits.

MILWAUKEE GAS SPECIALTY CO. • Dept. SB-8, Milwaukee 1, Wisconsin

FEBRUARY, 1956

107

BRUNNER LP gas
transfer unit
gives you a bonus of
→ **one extra tank car of gas**
from
every
20 tanks

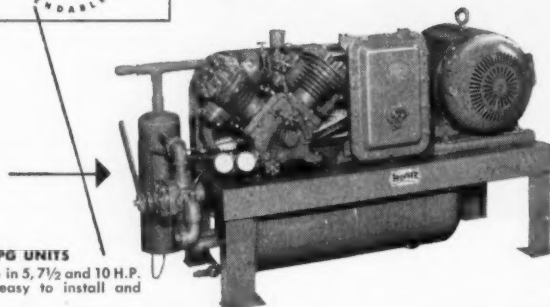
Yes, the Brunner LPG Transfer Unit removes up to 540 gallons more from every 10,000 gallon tank car . . . or the equivalent of one extra tank car of gas from every twenty. No liquid pump can give you such savings! The Brunner Unit not only transfers all liquid to your storage tank—but also removes and liquefies the gas vapors in the tank car.

WRITE FOR FREE BOOKLET

Shows you how to set up a highly efficient storage transfer system . . . describes safety and long life features of Brunner LPG Units.

BRUNNER MANUFACTURING COMPANY, UTICA, N. Y.
The Brunner Co., Gainesville, Ga.

In Canada:
Brunner Corp. (Canada) Ltd., Toronto, Ontario



BRUNNER LPG UNITS
are available in 5, 7½ and 10 H.P.
models . . . easy to install and
service.

METERS

Repaired and
Handled with Care



A COMPLETE REPAIR PICK-UP AND DELIVERY SERVICE

We are making regular deliveries and pickups along the Eastern Seaboard on a three weeks schedule.

By knowing in advance the types and

numbers of meters to be repaired, we reserve trucking space for pickups, and return them in forty to sixty days at no additional cost for transportation.

Price Lists and Trip Schedule Mailed on Request.

STANDARD METER REPAIR CO.

Fifty Years Experience

P. O. Box 322
Shelton, Connecticut
Telephone: 5-3448

midwestern and eastern industrial firms, has been appointed director of quality control for the home appliance division of Servel Inc.

He had been on special assignments since moving to Servel in September from the Glascock Brothers Manufacturing Co., Muncie, Ind., where he was director of engineering. He has also served as vice president and general manager of the Ontario Manufacturing Co., Muncie; general manufacturing manager of the American Transformer Co., Newark, N. J., and Carlisle, Pa.; plant manager of the Gray Manufacturing Co., Hartford, Conn.; and naval ordnance product manager at Sperry Gyroscope Co., Inc., Lake Success, N. Y.

**Joe Harper heads LPG sales
for Texas Boiler & Machinery**



Joe Harper

Texas Boiler & Machinery Co., Dallas, announces the appointment of Joe Harper as sales manager for its L. P. gas division.

Mr. Harper is well known in the Dallas area, having been engaged in L. P. gas sales work for five years. He recently returned to Texas Boiler after having left the company for a period of time.

**W. B. Dorsey is legal counsel
for Delta Tank Manufacturing**

William B. Dorsey has been appointed legal counsel and general credit manager of Delta Tank Manufacturing Co. Inc., according to Hal S. Phillips, president of the Baton Rouge firm.

Mr. Dorsey previously served as allocation and contract assistant for the Mississippi Chemical Corp., Yazoo City, Miss.

Delta Tank has also announced the appointment of Russell M. Bass Jr. as purchasing agent. He previously served as assistant purchasing agent in the Houston office of Gulf Oil Corp.

**Servel appoints John H. Wall
as executive vice president**

John H. Wall has been appointed executive vice president of Servel Inc., according to an announcement by Duncan C. Menzies, company president.

For the past year, Mr. Wall has

5 Reasons why **PHILGAS[®]**

is the largest selling brand of LP-Gas!

1 High Quality Product. Phillips modern fractionation methods, plus rigid product control tests, insure a clean, uniform fuel with a high thermal content.

2 Dependable Supply. Phillips ample storage facilities, modern transportation by pipelines, trucks and tank cars assure you of prompt deliveries of Philgas even in periods of peak demand.

3 Experienced Engineering. Phillips maintains a staff of LP-Gas specialists to advise their contract customers on economical plant design and safe efficient equipment. Take advantage of Phillips many years of practical experience in the LP-Gas field.

4 Effective Marketing Help. Philgas is the most advertised brand of LP-Gas in America! Promotions and advertising material, scaled to your needs, are available to Phillips contract customers.

5 Operational Assistance. Need advice on special operating problems? Phillips contract customers can call on Phillips for assistance at any time. And Phillips bulletins and information service keep you up-to-date on the latest improvements in equipment, newest safety measures, most efficient and economical distribution procedures.



Write for additional information.

LARGEST SELLING BRAND OF LP-GAS IN AMERICA



Philgas is our name for high quality LP-Gas—Bottled Gas—Butane—Propane.

**PHILLIPS PETROLEUM
COMPANY**

Sales Department • Bartlesville, Oklahoma

WOULD YOU BUY . . .

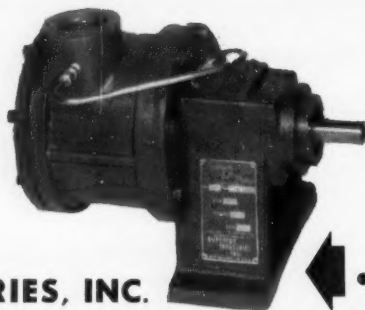
A PUMP THAT ELIMINATES THESE PROBLEMS?

1. *Pump Replacement* (because of metal wear);
2. *The Need for Spare Pumps* (freeing this capital for other uses);
3. *Costly Delays Due to Pump Failures* (just when you need them the most);
4. *Noise and Inefficiency* (against differential pressures);
5. *Wearing Out Truck Motor* (trying to make the pump deliver good gallonage);
6. *Failure to Fill Bottles and Cylinders Quickly* (because of pressure differential build-up);
7. *Inability to Produce 30 G.P.M. of Butane Against Propane* (without bleeding off higher pressures).

Save TIME
and MONEY
. . . GET A

Superior
L P G
PRECISION ROTARY PUMP

Write for Descriptive Folder
and Name of
Nearest Distributor



SUPERIOR INDUSTRIES, INC.

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**INQUIRIES INVITED
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Keep Up with L. P. gas
Developments Each Month

BUTANE-PROPANE
News

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See Page 2 for Foreign Rates

☐ Check herewith ☐ Bill me ☐ 1 year \$2.00 ☐ 2 years \$3.00

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Firm _____

Street _____

City _____ Zone _____ State _____

been vice president and general manager of Servel's home appliance division. In his new position he will also be responsible for a number of related functions, including appliance sales, contract sales, product development, engineering, employee relations, quality control, plant maintenance and procurement.

Another Sercel appointment is that of Martin A. Prince, who has been named product manager for room air conditioners and portable Wonderbar refrigerettes.

Mr. Prince's responsibilities will include the development of product line makeup, pricing, merchandising, promotion, and field work.

Wantz, timer control inventor, heads Robertshaw department



Clarence Wantz

Appointment of Clarence Wantz as chief engineer in charge of the engineering department of Robertshaw Thermostat Division of Robertshaw - Fulton Controls Co. is announced.

Mr. Wantz developed time controls for top burners of gas ranges which were introduced last year. The automatic shut-off controls, utilizing an elementary principle of physics, represented the solution to a problem that perplexed the gas industry for 25 years.

He became associated with the Robertshaw-Fulton organization in 1952.

Mr. Wantz replaces M. C. Potter, who has resigned.

In addition four executive appointments and a retirement were announced by John A. Robertshaw, president of Robertshaw-Fulton.

Woodford D. Miller, vice president and the general manager of the Robertshaw Thermostat division, has been made executive vice president in charge of the company's eastern operations. He is a veteran of 19 years' service with the company. The position that Mr. Miller assumes is a new office made necessary by the continued expansion of the controls business. He will be located at the executive offices in Greensburg, Pa.

Frank H. Post, assistant vice president, succeeds Mr. Miller as vice president and general manager of the Robertshaw Thermostat division. Mr. Post has been with the company 18 years.

George Mertz has been appointed

BUTANE-PROPANE News



Want to Make Your Customers Happy?

*Keep customers happy
By Assuring them all
The Big TEXGAS Family
Is always on call.*

Consistent high quality, ample supply, and prompt service are "musts" if you want to keep your customers happy. And those are exactly the features you get when you specify TEXGAS Propane and Butane.

TEXGAS is *quality-controlled* in manufacture; every tank car load must meet — and generally *exceeds* — N.G.A.A. specifications. The extensive plant capacities and product storage facilities of Texas Natural assure plentiful *quantity*, too. And the fact that Texas Natural has one of the country's largest tank car fleets, you and your customers can always depend on *better* service.

Winter, summer, spring or fall — for the kind of service that will keep your customers happy, just call, write or wire Texas Natural!



PROPANE • BUTANE • NATURAL GASOLINE
TEXAS NATURAL GASOLINE CORPORATION • TULSA, OKLAHOMA

WE SELL SAFETY!

You need protection when handling LPG or gasoline products.

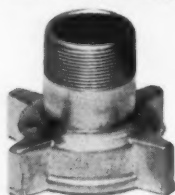
A speedy acme thread coupling is the safest means of making hose connection because, by gradual loosening of the threads, the pressure is always under control. The Roney hose couplings are tight and leak-proof. This type of connection cannot be jarred loose accidentally.

You will want to be well stocked with these "safety" couplings, so order today.

Pictured below is a complete assembly for hose and tank connections which comes in 2 sizes, the 3/4" group and the 2 1/4" group.



Tank to Hose Conn.
No. 1015
3/4" Acme x 2" NPT
No. 1015A
2 1/4"-6 Acme x 2" NPT



Fill Hose Coupling
No. 1016
3/4" FE. x 2" Male
No. 1016A
2 1/4"-6 Acme x 1 1/4" NPT



Seal Cap for Tank
No. 1017 - 3/4" Acme
No. 1017A - 2 1/4" Acme



Indispensable Coupling Wrench
No. 1027 - 3/4" Span.
No. 1029 - 2 1/4" Span.



Underwriters Laboratory Stamp of Approval

RONEY INC.

105 COLE STREET, DALLAS, TEXAS

LOOK TO RONEY FOR LP GAS AND NH₃ EQUIPMENT

assistant to the general manager of the division and will be in charge of manufacturing.

Jean V. Giesler, an executive vice president, will retire on Feb. 1, as general manager of the Fulton Sylphon division after almost 43 years of continuous service. Mr. Giesler will continue to serve as a consultant for the company.

Freeman G. Cross, vice president, will succeed Mr. Giesler as general manager of the Fulton Sylphon division. Mr. Cross has been with the company 28 years.

Richard D. Hall has been named representative of Robertshaw-Fulton Controls Co.

Formerly, Mr. Hall was with Southern California Gas Co. for more than eight years, serving in various capacities in the customer service department. His office is located at the company's Grayson Controls division, Long Beach, Calif.

Siegler appoints Johnson vice president, director



J. S. Johnson

J. S. Johnson, founder of the Holly Manufacturing Co., Pasadena, Calif., which was recently merged with The Siegler Corp., Chicago and Long Beach, Calif., has been elected a director and vice president of Siegler, and continues as president of the Holly Manufacturing Co. division, according to John G. Brooks, president of Siegler.

As a director of The Siegler Corp., Mr. Johnson succeeds William H. Husted, of New York, who has resigned.

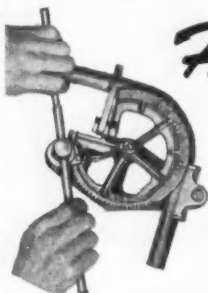
John Woltersdorf joins Quad Stove as sales manager

John W. Woltersdorf, Birmingham, Ala., has been appointed southeastern sales manager of the Quad Stove Manufacturing Co., Columbus, Ohio.

Mr. Woltersdorf, who was formerly with Dearborn Stove Co. as representative in the Alabama territory, will cover the states of Alabama, Georgia, and Florida.

E. B. Suydam is president of Linde Air Products

E. B. Suydam has been appointed president of Linde Air Products Co., New York, a division of Union Carbide & Carbon Corp. Mr. Suydam



Handy TUBE BENDER

Smoothly Bends Any Pipe or Tubing

3/8" to 1 1/8" O.D. . . .

• Just a twist of the wrist assures perfect, even bends — right angle, any angle, U and

offset. Save enough on ONE job to pay for your HANDY TUBE BENDER.



HOLSCLAW BROS., INC.

434 N. WILLOW ROAD — EVANSVILLE, INDIANA

See your supply house—or write for free folder today.

TANKS BY BANKS

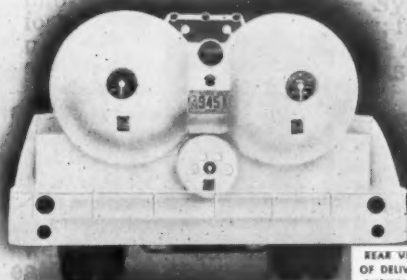
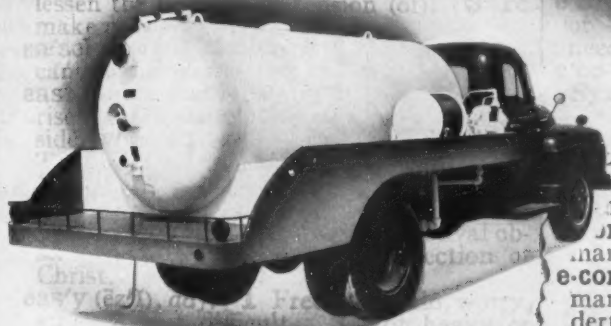
Economy

**LP-GAS
EQUIPMENT**

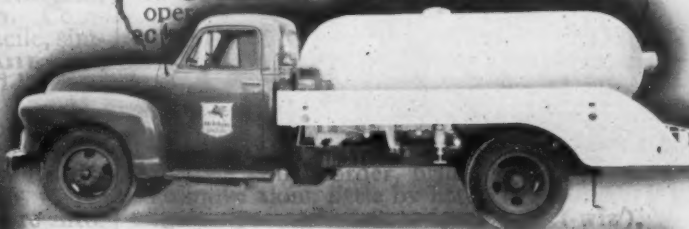
is all that the name implies!

- 1** Thrifty management by the manufacturers of Economy LPG equipment makes it possible for you to get finest quality equipment for every phase of your operation at a price as low — and quite often, lower — than ordinary equipment.
- 2** Working closely with LPG operators through the years, Dallas Tank Company has developed numerous new production methods which have kept down expenses. This means savings to you ... giving you the best for less!
- 3** Dallas Tank Company, Incorporated, is organized for efficient operation. Our prompt service is the result of complete coordination of sales, office and fabrication process. Any way you figure it, Economy (TANKS BY BANKS) LP-GAS EQUIPMENT is your best buy ... all that its name implies!

with the production, consumption, and consumption of wealth. — **e-con'o-mist** (ĕ-kŏn'ŏ-mĭst), *n.*
e-con'o-mize (ĕ-kŏn'ŏ-mĭz), *v. t. & i.* To manage thriftily; to be frugal.
e-con'o-my (ĕ-kŏn'ŏ-mĭ), *n.* **1** Thrifty management. **2** Any act or method undertaken to keep down expenses. **3** Arrangement or organization for efficient operation.
ec'sta-sy (ĕk'stā-sĭ), *n.* Rapture; bliss; notional excitement. — **ec-stat'ic** (ĕk'stā'tĭk), *adj.* — **ec-stat'ic-al** (ĕk'stā'tĭk-əl), *adj.*



REAR VIEW
OF DELIVERY
SHOWN AT
THE RIGHT



IN STOCK FOR IMMEDIATE DELIVERY

DALLAS TANK COMPANY, Inc.

Quality tanks for a quarter of a century

201-5 WEST COMMERCE ST., DALLAS, TEXAS

Phone Riverside 5001

• 409 LEE ST., VICKSBURG, MISSISSIPPI

Phone 2971

succeeds T. D. Cartledge, who continues as a vice president of the company.

Mr. Suydam joined the Union Carbide organization in 1916 as a salesman for Union Carbide Sales Co. in New York. He remained with that company until 1928, when he was made manager of the southwestern region of Linde, with offices in Kansas City. In 1929 he returned to New York to become gas sales manager of Linde and moved up to the position of general sales manager for that company in 1940. He became vice president of Linde in 1942.

The company has also announced the promotion of William M. Haile as a vice president. He joined Union Carbide in 1925 in Linde's southern division office in Birmingham.

Rheem Manufacturing names Leo Givens comptroller

Leo F. Givens of Chicago has been elected comptroller of the Rheem Manufacturing Co. His appointment was announced at the Rheem general office in Richmond, Calif. by vice president Gordon W. Mallatratt, company secretary and treasurer.

Mr. Givens, who was named controller of the Rheem Products division only last September, succeeds C. B. Huestis following the latter's resignation to accept a position with another firm.

It was at Richmond that he joined Rheem in 1946 as an accounting clerk. He later served as senior accountant at Rheem's Houston plant, where he became plant manager in 1953. Givens was named assistant to the comptroller in January 1955 and was transferred to Chicago.

Reed heads Minneapolis office of Janitrol heating division



Ray Reed

The appointment of Ray Reed as district manager for the Minneapolis territory of the Janitrol Heating and Air Conditioning division of Surface Combustion Corp. is announced by Mr. H. C. Gurney, Janitrol sales manager. Mr. Reed, who has been acting district manager, will direct sales and service activities for the complete line of Janitrol residential and commercial heating and cooling equipment. His territory will include Minnesota, North Dakota, Montana and sections of the states of South Dakota, Wyoming and Wisconsin.

Mr. Reed has been in the Janitrol Minneapolis district sales office since 1949 and was previously associated with the Thomas Steel Mill, Warren, Ohio.

Squire to head Dearborn sales in northern section

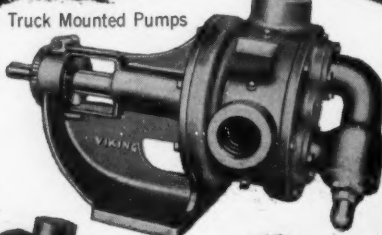
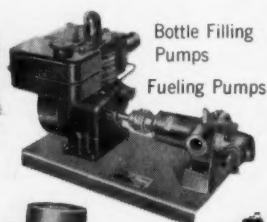


R. D. Squire

Robert D. Squire has been named sales manager of the midwest, northern Great Plains and eastern Rocky Mountain states area for Dearborn Stove Co., Dallas, according to E. S. Kleinmann, Dearborn vice president and general sales manager.

For the past three years Mr. Squire has been a Dearborn representative in the Midwest, with Fort Wayne, Ind., as his base of operations. He will now supervise Dearborn's sales

VIKING LP GAS PUMPS GIVE YOU A CHOICE...



10 SIZES
40 MODELS
for 4 applications

Bulk Transfer Pumps

Your LP-Gas pumping problems can really be met with this complete line . .

1. Bottle Filling Pumps
 2. Fueling Pumps
 3. Truck Mounted Pumps
 4. Bulk Transfer Pumps
- Sizes included —
8, 10, 12, 20, 28, 30, 38,
70, 90 G.P.M.

With all these pumps, you get the advantage of these features . . .

No lubrication required.

No leakage with positive mechanical seal and O-ring.

No mis-application because of the complete line to choose from.

No pump house needed. Install right outdoors if desired.

FOR COMPLETE INFORMATION, ASK FOR
CATALOG SECTION Hb TODAY.



VIKING PUMP COMPANY

Cedar Falls, Iowa, U.S.A. In Canada, it's "ROTO-KING" Pumps

FIGURES THAT SPEAK FOR THEMSELVES...



55 GALLONS PER MINUTE!

Art Gerber of the Blue Flame Gas Company of Bluffton, Indiana recently purchased four model S-1800 McNamar tank trucks.

After putting these units into operation, Gerber reports, "We feel the McNamar tank truck is the best looking and best engineered unit on the market today. We have actually pumped up to 55 gallons per minute with these efficient units."

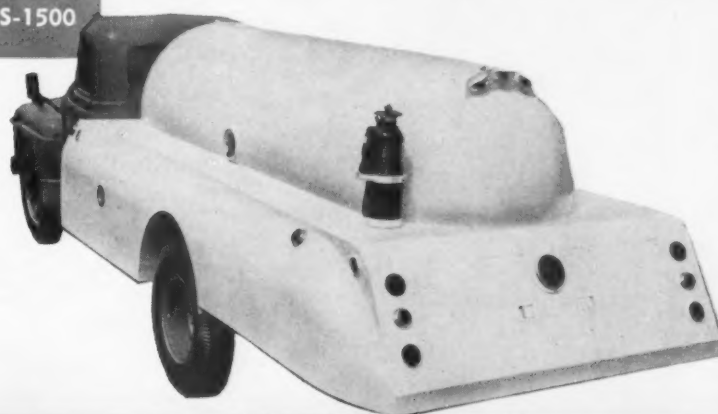
Arthur Gerber

For the longer route, the Model S-1800 offers economical deliveries to all installations. It's light and short enough to use the same chassis as smaller trucks, but large enough to save many an extra trip.



MODEL S-1800

This McNamar truck tank offers low center of gravity; maneuverability, fast and economical deliveries for the average delivery route. It's small enough for bad roads, yet large enough to be profitable for most routes.



MODEL S-1500



McNAMAR
BOILER & TANK CO.
BOX 868 • PHONE CHerry 2-6291
TULSA, OKLAHOMA

activities in the northern portion of the country from Dearborn's offices in Chicago.

Two executives elected to board of ACF Industries Inc.

Roy A. Fruehauf, president of Fruehauf Trailer Co., and George C. Leib, vice chairman of Blyth & Co. Inc., have been elected directors of ACF Industries Inc. Their election increases the number of directors from 10 to 12.

Wayne Smith, Continental Water Heater president, retires



W. R. Smith

Upon the advice of his doctors, Wayne R. Smith Sr., president of Continental Water Heater Co., retired on Jan. 1. Mr. Smith is an old-timer in the gas industry, having started in the water heater business in 1927. In 1930, Continental was started by him, together with John Wilson, Dick Eisinga, and Klaas

Eisinga. In 1950 Continental merged with National Steel Construction Co. of Seattle, with Mr. Smith a member of the board of directors.

Continental and National Steel have announced the appointment of Wayne R. Smith Jr. as general manager of Continental, succeeding his father.

Dixie Products appoints four sales representatives

Appointment of four Dixie gas range sales representatives in line with a planned expansion program by Dixie Products Inc., Cleveland, Tenn., have been announced by S. B. Rymer Jr., president.

Charles P. Connally Jr. will expand Dixie representation in northern Texas. Before joining Dixie Products, he was a special sales representative for Florence Stove Co. and Congoleum-Nairn.

James N. Jensen will have Colorado and bordering states as his territory for Dixie ranges. Jensen was formerly with Ohio Fuel Co. in Coshocton.

A three-state territory of Iowa, Kansas, and Nebraska has been assigned to Max R. Bowlin who joins

Dixie Products after sales positions in South Bend and Elkhart, Ind.

Charles S. Broadhurst will represent Dixie in Alabama and in parts of Georgia and Florida. Formerly he was with Georgia Highway Express Trucking Co.

Robertshaw-Fulton Controls adds to home economics staff



Shirley Pemberton

Planning increased activity in the consumer, home economics, trade and utility fields, Robertshaw-Fulton Controls Co. has appointed Shirley Pemberton to the staff of its home economics department.

Mrs. Pemberton was formerly with International Milling Co., serving as home economist. Prior to that time, she was employed in a similar capacity by Arvin Industries, manufacturers of household appliances. She is an alumna of the University of Minnesota.

Regional appointments made by General Controls Co.

Several appointments have been announced by General Controls Co., Glendale, Calif.

George A. Williams Jr. has been named manager of the Detroit factory branch. He was formerly assistant manager of the branch.

John F. Dickson, formerly field representative at the Detroit branch, has been named manager of the Chattanooga, Tenn. office.

Byron B. Spinney has been named regional representative for the New York regional office. From his headquarters in Long Island City, Mr. Spinney will assist architects and builders in securing information related to new developments in the controls field.

R. C. Servat, formerly manager of the New Orleans branch, has been named manager of the Houston branch.

Peerless Pump appoints Blair as process pump specialist

Announcement is made by Peerless Pump Division, Food Machinery and Chemical Corp., of the appointment of Walter J. Blair as process pump specialist.

Mr. Blair will devote his time to pump application problems in refin-



Mutual

LIQUID GAS EQUIPMENT CO., INC.
17129 South Broadway, Gardena, Calif.



OUT OF THIS WORLD!

*big fat savings
with starmaster
fryers*

Gas and Electric Models Available

Stop wasting expensive cooking fat! Don't let old fashioned, low performance equipment burn up profits. Users of new Starmaster fryers report terrific savings in operating costs. They like Starmaster frying speed. They like the beautiful, modern, Starmaster look. They like the compact, space-saving Starmaster size... the quality construction in smart, easy-to-clean stainless steel and chrome. See for yourself. Visit your dealer. Compare Starmaster design and high

performance features with any other. Then compare the price! You'll find Starmaster this year's greatest fryer value. Available in floor and counter models. Don't wait. Save money you are spending on operating costs that could be profit. See the complete Starmaster Matched Line. There is a Starmaster unit for every counter cooking need.



STAR MANUFACTURING COMPANY • ST. LOUIS 20, MO. • Division of Hercules Galion Products, Inc.
Canadian Distributor: CROWN ELECTRICAL MFG., LTD. • BRANTFORD, ONTARIO, CANADA

SAFE, PORTABLE HEAT

johnson
NO. 1330 PORTABLE SPACE HEATER

Safe, efficient heat in unfinished buildings or wherever temporary heat is needed in well ventilated rooms. Johnson's 1330 Portable Space Heater gives best possible heat distribution with balance of radiant and circulated heat. It's rugged, yet light enough to carry. Guard rods and Robertshaw TS11 100% safety shut off valve and pilot. Heater is 18" diam., 27" high. Capacity up to 63,000 BTUs . . . available for any type gas.



**No time-consuming
call-backs when you sell**

A. R. WOOD
RADIANT
Gas Brooders

You'll save time when you sell your customers A. R. Wood Radiant Gas Brooders. That's because A. R. Wood Brooders are fool-proof — easy to install, easy to operate.

You'll eliminate unprofitable call-backs to adjust the burners, regulate the valves, etc. *That's because A. R. Brooders are tested and adjusted at the factory to give top performance from the start . . . another reason why A. R. Wood Radiant Gas Brooders are the best sellers among experienced poultrymen from coast to coast.*

**Stock the Brooder
that SELLS ITSELF!**



A. R. WOOD MFG. CO.
SANTA CRUZ, CALIFORNIA • LUVERNE, MINNESOTA

eries, chemical process and industrial plants, coordinating his efforts with the Peerless' field engineers and distributors. His headquarters will be at the company's Los Angeles plant, 301 West Avenue 26.

Thomas Truck names Anderson general sales manager

Thomas Truck & Caster Co., Keokuk, Iowa, has announced the appointment of C. Parke Anderson as general sales manager of the company.

He will direct the sales activities of the 100-odd sales territories throughout the United States, including the company's export and railroad operations.

Mr. Anderson has been associated with the Thomas company for the past 12 years. Before being promoted to general sales manager he had served as assistant to that post.

Downingtown Iron Works appoints Killen and Keehn

W. L. Killen has been named works manager of the fabricating plants of Downingtown Iron Works, according to a recent announcement by Herbert E. Brumder, president and treasurer of the Downingtown, Pa., corporation. At the same time, Mr. Brumder said that William F. Keehn has been appointed manager of product development.

Downingtown Iron Works is operated as a division of Pressed Steel Tank Co., Milwaukee.

Frank Perez joins International in northern California area

International Sales Co., San Francisco, has announced the appointment of Frank Perez to handle sales of the company's furnace lines in northern California.

He was formerly northern California factory representative for General Water Heater Corp.'s heating division.

American-Standard appoints Buffalo sales representative

Chester A. Brunner has been named district sales representative for the Buffalo, N. Y., area of American Radiator & Standard Sanitary Corp.'s air conditioning division. He will work with distributors in the area.

Mr. Brunner has had wide experience in the sale, installation, and maintenance of air conditioning equipment.

Here's Your Profit Combination!



When you deal with Sinclair, you're setting the dials for bigger profit opportunities. For instance, every tank-load of Sinclair LP-Gas is guarded by the five famous Sinclair extras — INTEGRITY, REPUTATION, QUALITY, PERFORMANCE and GOOD SERVICE — to protect and build *your* business reputation. For you, this combination opens the door to increasing sales and profits, with a growing list of satisfied repeat customers. Get the facts on this top quality LP-Gas with high heating value — moisture and impurities removed — then, make the switch to Sinclair.



Sinclair Oil and Gas Company
Liquefied Petroleum Gas Sales Department
Sinclair Oil Building, Tulsa, Oklahoma

SINCLAIR
A Great Name in Oil

MAKE '56 A MARTIN YEAR

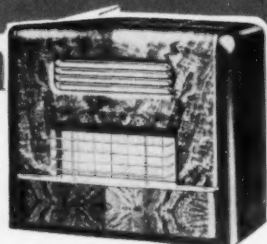
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GAS HEATER line

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15,000 BTU to 85,000 BTU
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All Martin Heaters are
AGA approved for
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manufactured gases.



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OVER
50 YEARS
HEATER
EXPERIENCE

MARTIN STAMPING & STOVE CO., Huntsville, Ala.

WHITE RIVER Has Special Service For NEW DEALERS

Send your driver down to pick up your new White River Propane Truck Tank unit. We'll give him the first hand experience of a "check-out run" over our own retail gas route, thoroughly explain every feature, and show him, right on the job, how to operate it for maximum efficiency. Just another one of the PLUS services you get from WHITE RIVER. Write today for prices and specifications on the complete White River Line.

**Convenient Finance Terms
On Both Tanks and Trucks**



THE WORLD'S FINEST PROPANE TRUCK TANKS

W WHITE RIVER
DISTRIBUTORS, Inc.
TELEPHONE 570 BATESVILLE, ARK.

SEE OUR AD IN THE CLASSIFIED SECTION

NO COMPOUND COMPARES WITH RECTORSEAL No. 2

For Cleanness

Light in color, Rectorseal does not stain hands, clothes, job site. Easily removed with lacquer thinner.

For Smoothness

Smooth as satin because it's finely ground and homogenized—always free of foreign matter. No lumpy ingredients to settle out.

For Elasticity Thin in container, Rectorseal No. 2 spreads smoothly over even fine threads—thickens in the joint to a plastic elasticity that positively seals against leaks, yet is easy to break-out. Meets Pamphlet No. 58 requirements. Never hardens—holds pressures up to 11,350 p.s.i.

For Economy Rectorseal No. 2 has no match. It actually costs less to use than other compounds—yet outperforms them all.

Write for a generous FREE SAMPLE

RECTORSEAL, Dept. A
2215 Commerce Street, Houston 2, Texas

RECTORSEAL # 2

MAKING THE L.P. GAS INDUSTRY SAFER



McClellan succeeds Hawley at William Wallace Co.

George B. McClellan, San Francisco, has been appointed sales manager of William Wallace Co. according to an announcement by Alan Kinkead, president of the Belmont, Calif., firm.

Mr. McClellan will succeed A. L. Hawley Jr., who resigned from the company Jan. 1. Mr. Hawley, who has been Sales Manager since 1946, will continue to serve William Wallace in a consulting capacity.

Mr. McClellan has been associated with the company for the past nine years. During the past year he has been sales promotion manager for the company.

Frank Edward Payne

Frank Edward Payne, chairman of the board and co-founder of Crane Packing Co., died late last November at his home in Glencoe, Ill. The 72-year-old industrialist had been ill for a long time.

Mr. Payne was a nationally recognized authority in the products his company produces, which includes mechanical packings, mechanical seals, Teflon products, lapping machines and pipe joint compounds.

Starting his career as a pump salesman, Mr. Payne gained much of the thorough first-hand knowledge that led to his part in the founding of Crane Packing Co. He became president in 1917 and for 34 years guided the firm in its growth. He was succeeded in the presidency by Karl Rohlen in 1951, at which time he became chairman of the board.

Mr. Payne was a member of the American Society of Mechanical Engineers, Society of Automotive Engineers, Alumni Organization of Massachusetts of Technology (class of 1905) and Sigma Alpha Epsilon fraternity. He is survived by his widow and daughter.

Joseph L. Comer

Joseph L. Comer, vice president of the Wm. Powell Co., died late in December in New York City following a brief illness. Mr. Comer, 61, was widely known in the valve and petroleum industries, having been general manager of Powell's New York office since 1948. He had held executive positions in the industry prior to that time.



Here's a promotion idea from RHEEM that will get new customers for you!

**—and it's just one part of the big, new
Rheem Merchandising Plan designed to
increase your plumbing business**

Here's a little lady just waiting to recruit new customers for you. Why? Because when she opened her mail she found a pleasant surprise—and you sent it to her!

What is it? It's a Rheem-prepared "thank you" letter over your signature. Another Rheem sales promotion

idea that has met with terrific success—and it's just one part of a Rheem Merchandising Plan that no one selling Rheem Products should be without. Included in this sales-clinching plan are many tried and proved ways to promote new business—ways to create customer good will—ways to keep customers coming back to you.

Don't put off *your* bid for new business—do it now! Clip and mail the coupon below. It's the first step toward putting new life in your business and new profits in your pocket.

You can rely on



World's largest maker of automatic storage water heaters

4361 Firestone Blvd.
South Gate, Calif.

801 Chesley Ave.
Richmond, Calif.

7600 Kedzie Ave.
Chicago 29, Ill.

1025 Lockwood Dr.
Houston, Texas

3693 Marginal Way
Seattle, Wash.

Box 6718
Sparrows Point 19, Md.

**RHEEM MANUFACTURING COMPANY, BPN-2
7600 S. Kedzie Ave., Chicago, Illinois**

Please rush the full particulars on the
Rheem Merchandising Plan to:

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____



CLASSIFIED Advertising

All Classified Advertising payable with order. Copy must reach publisher's office prior to the fifth of the month preceding publication. Address: Classified Advertising Material, BUTANE-PROPANE News, 198 S. Alvarado Street, Los Angeles 57, Calif.

DISPLAY CLASSIFIED

\$12.00 a column inch per issue. Choice of 18, 14, 12, 10 pt display type for headings. Set with 1 pt border. Maximum ad size 3". No cuts permitted. Publisher will set ad for maximum effect in space purchased.

UNDISPLAYED CLASSIFIED 15¢ a word. Set in 7 pt type without border. \$3.00 minimum charge per insertion. If Blind Box number care of B-P News is used, count as five words.

POSITION WANTED. Undisplayed rate is one half of above rate, payable in advance.

DISCOUNT OF 10% if full payment is made in advance for four consecutive insertions of undisplayed ads.

HELP WANTED

WANTED: TECHNICAL WRITER. WE need a technically trained man under 35 for the editorial staff of BUTANE-PROPANE News. He should have a background of mechanical engineering and experience in LPG or Gas Operations—with emphasis on equipment. He should be able to write clearly and cleanly and have done some work in preparing reports. He should have an inquisitive mind and like to probe into the "Why" of things, and be able to explain to others what he has found out. Experience in magazine or newspaper production as well as photography is desirable, but not essential. Duties will include field trips to gather data for original articles. Application by letter only. Send details to: BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

SALESMEN—COVERING BULK PLANTS and large dealers. We have an interesting, non-conflicting, nationally advertised line that the trade is using daily. All territories open. Reply Box 14, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

EXPANDING CONCERN REQUIRES ADDITIONAL commission salesmen gas, wood, and electric ranges, Built-ins and Standing. Box 1634, Muskogee, Oklahoma.

SUPERVISOR: FOR LP-GAS RETAIL plants in California. Some sales and mechanical experience, age approximately 30 years, married, future in management position. Reply Box 17, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

DISTRICT MANAGERS WANTED

Openings for three district managers in mid-western state, experienced in propane operations. Applicants must be capable of handling all phases of propane operation, including promotions, sales, operations, etc. Please give details of propane experience, education, etc., in first letter. Applicants reply to

BOX NO. 12
BUTANE-PROPANE News
198 So. Alvarado Street
Los Angeles 57, Calif.

BUSINESS OPPORTUNITIES OFFERED

WANTED: OPERATORS FOR L. P. GAS plant. We furnish and install, finance all bulk plant equipment on your ground, will make lease with option to purchase. McNamar Boiler & Tank Company, Box 868, Tulsa, Oklahoma. Phone CH 2-6291.

FOR SALE
ARIZONA BUTANE-PROPANE BULK
AND BOTTLE BUSINESS
Equipment in A-1 condition. Sales over 1/2 million gallons yearly. Located in Vacationland of Arizona. Business very good all year.
VAPOR BUTANE COMPANY
P. O. Box 233, Springerville, Arizona

BUSINESS OPPORTUNITIES - Cont.

LPG BULK PLANTS. WE SPECIALIZE in selling petroleum properties throughout Midwest. Have number desirable plants for sale. OLE BRODD, PETROLEUM MARKETERS, 605 Produce Bank Bldg., Minneapolis, Minnesota.

FOR SALE: ESTABLISHED BULK AND cylinder business in Eastern Wisconsin. Selling for family reasons. \$50,000 will handle. Furnish references. Reply Box No. 9, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

COMMERCIAL GRIDDLES AND RANGES—Manufacturers' agents now selling gas ranges, gas heaters to L. P. dealers can profitably add commercial griddles and ranges. Old established popular line available. Reply Box No. 6, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

BUSINESS OPPORTUNITIES WANTED

WANTED TO BUY: SMALL CYLINDER business S.E. Wisconsin. Must own own cylinders. Reply Box No. 8, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FOR SALE — TRUCKS - TRAILERS

1400 WG MODEL 100 TWIN, 250 Lb. W.P. trim skirted tank, mounted on 1956 Chevrolet 2 ton, 2 speed, 825 rear tires, ONLY \$3,605.00, Fed. Tax paid. Pump, meter, hose, plumbing also available. EASY TERMS. White River Distributors, Inc., Phone 570, Batesville, Arkansas.

1800 WG MODEL 100, 250 Lb. WP TRIM skirted tank, mounted on 1956 International SP-162 with a 264 cu. in. FACTORY LPG ENGINE, 2 speed axle, 825 rear tires, only \$4,166.00, Fed. Tax paid. Packaged Plumbing, meter, etc., available. EASY TERMS. White River Distributors, Inc., Batesville, Arkansas.

IMMEDIATE DELIVERY PROPANE TRANSPORTS

New 5700 Gal. Twin Transport
Tandem Axle, Air Brakes, 10:00
x20 Tires, 265# Working Pressure.

New 7200 Gal. Single Barrel
Tandem Axle, Air Brakes, 10:00
x20 Tires, 265# Working Pressure.

ARROW EQUIPMENT COMPANY, INC.

P. O. Box 2682
Memphis, Tennessee

FOR SALE—TRUCKS - TRAILERS - Cont.

DELIVER MORE GAS IN LESS TIME . . . with 1800 WG U-69 Nor-Tex Twin Delivery Unit equipped with high flow piping. For only \$2,194.80 (including tax) it can be mounted on your choice of truck or on one you already have. Trim skirting, ICC lights, Viking mechanical seal pump, P.T.O., spline jack shaft and 50 ft. filler hose. Call NOR-TEX PRODUCTS COMPANY collect, C-5416, Denton, Texas.

FOR SALE: DELIVERY TRUCK, 1500 gallon single or double barrel units, plumbed Viking KK200 pump, PTO, 50 ft 3/4-in. hose, 50 ft 1/2-in. hose, directional lights, mounted on new two-ton Chevrolet truck and ready to pump gas at only \$4875.00, Federal Tax paid. 25% down and up to thirty-six months to pay. McNamar Boiler & Tank Company, Box 868, Tulsa, Oklahoma. Phone CH 2-6291.

NOR-TEX "PACKAGE UNITS" SAVE TIME AND MONEY. They earn more! They cost less! We will mount this 1400 WG U-69 Twin Delivery Unit on a new truck of your choice or on a truck you now have for only \$1,935.00 (Excise Tax paid). The unit is equipped with high flow piping. Delivers more gas in less time. Has trim skirting, P.T.O. spline jack shaft, Viking mechanical seal pump, 50 ft. filler hose and ICC lights. Painted white enamel over red oxide. Call NOR-TEX PRODUCTS COMPANY collect, C-5416, Denton, Texas.

THREE USED PROPANE SEMI-TRAILERS for sale. Single axle, twin barrel, 4800 gallon W.C. Cargo tanks constructed in accordance with A.S.M.E. Code. Par U68, 200 P.S.I. working pressure. \$4,000 each. Reply Box No. 16, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

DELIVERY UNITS: SINGLE OR Twin Barrel. Our prices are competitive. We invite comparison between the equipment and price on our units with any competitive units. We believe we can give you the highest payloads per pound of gross vehicle weight. Write, wire, or phone, Lubbock Machine & Supply Co., Inc. Drawer 1589, Lubbock, Texas.

FOR SALE: 5000, 5500 and 6000 gal. W.G. U69 Tandem Propane Twin Barrel Trailers. Choice of 16 with 50% 10:20 tires, air brakes. Now operating. Texas R.R. Commission, ICC, ASME approved. Delivery will be made to most northern cities for \$200. Write for pictures, details. IRVIN F. NELIS ASSOCIATES, P. O. Box 14472, Houston 21, Texas.

TRANSPORTS: SINGLE OR TWIN barrel; new or used; for lease, or sale on budget or rental sale plan. If you want maximum payload, with all of the latest equipment engineered to fit your truck, roads, and your hauling problem, get the LMC PAYLOADER. Contact Lubbock Machine & Supply Co., Inc., Drawer 1589, Lubbock, Texas.

CLASSIFIED Advertising



FOR SALE — TANKS - CYLINDERS

FOR SALE—EIGHT 62-GALLON ASME-U-69 Motor Fuel Tanks made by Pressed Steel. New—never been used. Completely valved. Available separately or in pairs with racks for saddle mounting across frame. \$50 each, racks—\$25 each. J. M. Woody, Bottled Gas Corp. of Va., Box 5224, Richmond, Virginia.

FOR SALE: ICC 26-150 (RESTAMPED TO ICC 26-300) 88-lb. propane capacity cylinders 13" ID x 45". Average weight 123#. Complete with 3104CO wrench type valves and caps. Good condition. Attractively priced at \$4.50 F.O.B. Midwest points. Write for details and complete specifications. Address: CYLINDERS, P. O. Box 436, Kansas City 41, Missouri.

SKID TANKS

— IN STOCK NOW —

3000 gallon size built especially rugged for oil field use. Write, wire or phone

Lubbock Machine & Supply Co., Inc.
P. O. Drawer 1589
Lubbock, Texas

OVER 2000 TRACTOR AND MOTOR FUEL TANKS CURRENTLY IN STOCK

Write for WEEKLY stock lists.
WESTERN TANK & STEEL CORP.
Box 1013
Lubbock, Texas

STORAGE TANKS

Available Immediately

In the following capacities: 1000, 2000, 3000, 5000, 6000, 8000, 10,000, 15,000, 18,000 and 20,000. Your choice of 46" to 96" diameter. Write, wire or call Lubbock Machine & Supply Co., Inc., P. O. Drawer 1589, Lubbock, Texas.

ABOVE GROUND PROPANE TANKS

115 to 1000 Gallons

2 to 3 YEARS TO PAY, or
CONSIGNMENT PLAN

Unloaded by our truck
on your yard.

Write TODAY
for Prices and Details.

WHITE RIVER DISTRIBUTORS, INC.

Batesville, Arkansas

WHATEVER IT IS

YOU HAVE FOR SALE, WANT TO BUY OR TRADE OR FIND — you can do it quickly, easily, with a B-P News classified ad.

FOR SALE - TANKS - CYLINDERS - Cont.

PROPANE TRUCK TANKS

Model 100 with trim skirting. Prices INCLUDE Fed. Tax and mounting on chassis.

1400 WG—	\$1,395.00
1500 WG—	\$1,482.00
1800 WG—	\$1,676.00
2000 WG—	\$1,892.00
2200 WG—	\$2,108.00

Your choice of 5 Models, 600 to 2300 WG Twin or Single.

Packaged Plumbing, pumps, meters, etc., and all makes of trucks available. LOW DOWN PAYMENT, up to 3 Years to Pay. Write for Descriptive Folder.

WHITE RIVER DISTRIBUTORS, INC.

Batesville, Arkansas

FOR SALE—MISCELLANEOUS

SERVEL REFRIGERATORS
CLEAN — ALL CHECKED OK
Model M500A.....\$15.00 each
Model N500A.....\$18.00 each

In lots of 12 or more.

FRED A. BROWN COMPANY
100 E. Allegheny Avenue
Philadelphia 34, Penna.
Est. 1918 REgent 9-1130

FOR SALE: BAKER ALCOHOL PUMPS—The sure cure for moisture conditions. Standard equipment of many LP Gas Dealers. Hydraulically designed to inject alcohol against pressure. Baker-Engineering, Malone, N. Y.

DECALS MADE FOR TRUCKS, EQUIPMENT. Small or large quantities. Catalog free. Mathews Co., 827 S. Harvey, Oak Park, Ill.

FOR SALE—IMMEDIATE DELIVERY! Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P.O. Box 396, Beloit, Wisconsin.

NEW L. P. GAS FIRED ENGINE WARMER. Write for literature and prices. Seibold L. P. Gas Sales, Manitowoc, Wis.

SERVEL GAS REFRIGERATORS

S600A, with CROSS-TOP FREEZER

M400	4 cu. ft.	@	\$15.00
R400A	4 cu. ft.	@	\$22.00
S400A	4 cu. ft.	@	\$28.00
BN600A	6 cu. ft.	@	\$46.00

Used: guaranteed in good operating condition. Modern, attractive, excellent condition. Minimum shipment 12. Low delivery cost anywhere. Send for illustrated folder NOW and be ready for your Spring selling season.

BEACH REFRIGERATOR CO.

196-11 Northern Blvd., Flushing 58, N. Y.
Phone Flushing 7-6161

FOR SALE — MISC. - Cont.

COVERS — FOR RANGE, REFRIGERATOR, and TV. Top quality at low prices. Stop delivery damage. Write for descriptive literature and prices. Neal Products, 63 Malden St., Worcester, Mass.

WANTED — MISCELLANEOUS

WANTED: USED TRUCK METER AND hose reel. Also used bulk plant equipment. We need pumps, compressors, unloading and filling equipment. Small steel buildings. Let us know what you have. State price, quantity and condition. Hayfield Hardware Store, Hayfield, Minn.

WANTED: USED 60# PROPANE CYLINDERS, 60# or less tare weight, Hackney type. State tare weight, state manufacture, type of valve and condition. Reply Box 15, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

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& Assoc., Inc.
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MISCELLANEOUS SERVICES

BUSINESS RECORD FORMS. ALL-WEATHER EZE-SNAP delivery invoices, for use when making LP gas metered truck deliveries. 1000 sets (3 part) imprinted with name, address and telephone. \$17.50 per 1000 sets. DEGREE DAY SYSTEMS, WOODSIDE 77, L. I., N. Y.

CLIENTS OFTEN INCREASE PROFITS 2% or more by using my cost reducing bulk and bottle operating procedures and sales procedures. Property evaluations and special assignments also handled. Floyd F. Campbell, Management Counselor, 821 Crofton Ave., Webster Grove 19, Mo.

Eliminating liquid fuel hazards at cotton gins

RICHARD J. DORMAN, director, motor vehicle comptroller, who is in charge of safety matters in the LPG industry for the state of Mississippi, calls attention to unsafe conditions which have been reported in connection with L. P. gas carburetion installations on engines operating cotton gins in that state. Since similar conditions may be found in other places, we present a summary of his report.

Mr. Dorman's report calls attention to two hazardous conditions which should be avoided on all new installations, and corrected on all existing installations where these conditions exist. The first is the use of copper tubing as the final connection between the high pressure line and the regulator. In some cases these connections have ruptured due to work-hardening of the copper caused by engine vibrations. In Pamphlet 58, paragraph 4.10, (Stationary or Portable Engines in Buildings) we find: "(f) An approved flexible hose connection not exceeding 3 ft in length

shall be installed at the engine end of the fuel line. The flexible connection shall be installed in a manner so as to eliminate the possibility of damage from vibration." Recommended procedure under the last sentence should include one or more curves in the flexible connection, and if it is joined to a copper tube fuel line, this should be anchored securely where the tube and the flexible connection join. There should also be a manual valve at this point so the fuel can be cut off when work on the engine is necessary.

The second hazard pointed out by Mr. Dorman is the absence of excess flow valves of suitable size to provide protection against escape of liquid fuel in case the fuel line to the engine includes a pipe or tube of smaller size than that for which the excess flow valve at the tank outlet is designed. For example, of the outlet line is $\frac{3}{4}$ -in. pipe, with the correct excess flow valve at the tank, and this is reduced to the customary $\frac{3}{8}$ -

in. copper tube before reaching the primary regulator at the engine, rupture of the tube will not stop the fuel flow, as its capacity is less than the flow necessary to close the valve at the tank. To be safe, a second excess flow valve designed for use with the $\frac{3}{8}$ -in. line is necessary ahead of the tubing.

(While Mr. Dorman did not point this out, the storage tanks at cotton gins and similar industrial installations are generally located at a considerable distance from the engine room, and the gas is carried to the building in a buried pipe. A $\frac{3}{4}$ -in. pipe 100 ft long contains enough liquid fuel to produce a serious hazard in case the pipe is broken off. The installation of one or more excess flow valves of the pipe size at intervals across the yard will provide valuable protection in case anything happens to break the line between the tank and the building. In many gins gas is also used to operate the dryers, in which case it is advisable to use a vaporizer. This should be located near the tank so the pipe to the building will carry vaporized fuel at low pressure. This low pressure fuel may also be used to operate the engine, eliminating the need for a primary regulator and vaporizer at that point.) ■

Do You Have Photographs of Fork Lifts and Industrial Trucks in Action?

We want to reproduce the twenty best pictures on the above subjects in the United States and Canada showing these units operating on L. P. gas to illustrate the "Fork Lift and Industrial Truck Round-up" which will be the big feature of the Power Department in the April issue. We will buy these photographs at the following prices:

For the one best picture\$10.00
 For the two next best, each\$ 7.50
 For all others selected\$ 5.00

Prints should be on glossy paper, 8 x 10 or 5 x 7 inches, well lighted and showing full detail. While professional quality is desired, well planned and correctly exposed amateur photographs of good reproductive quality will be accepted. The trucks should be photographed while doing their regular jobs. Trucks should be operated by companies whose names will be recognized throughout the United States.

Each photograph should be accompanied by the following data: Name of operating company and location of plant

where used; how long the truck has been operating on LPG; whether the fuel equipment was factory-installed or converted after purchase; make of carburetion equipment; what the operating company says about economy, dependability, freedom from exhaust fumes, employee attitudes.

Photographs must be received in our office by February 20. Payment will be made by April 1. Cutline will give credit to individuals submitting winning entries. Mail all entries to:

BUTANE-PROPANE NEWS PHOTO CONTEST • 198 S. Alvarado St., Los Angeles 57, Calif.

POWER

**Agriculture
for Automotive
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**LP-GAS
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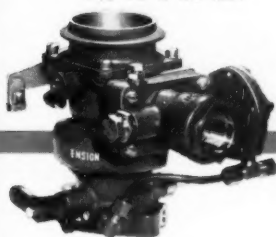
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Satisfaction with LP-Gas as an engine fuel depends greatly upon the carburetion which you select.

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Ensign carburetion is **DEPENDABLE**. In the long run you are money ahead to specify Ensign for every kind of LP-Gas powered equipment. Simply tell us your engine make, model and speed. We'll recommend the best equipment to do the job.

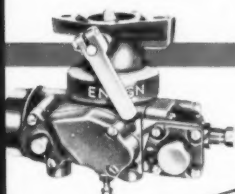
XG GAS CARBURETOR
1 1/4 TO 2 IN. SAE



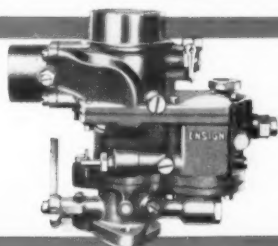
ENGINE SAFETY SHUT-OFF VALVE
VACUUM OPERATED



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3/4 AND 1 IN. SAE



CG GAS-GASOLINE
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1 1/4 TO 2 IN. SAE

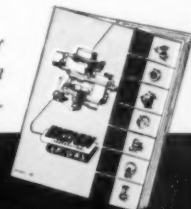


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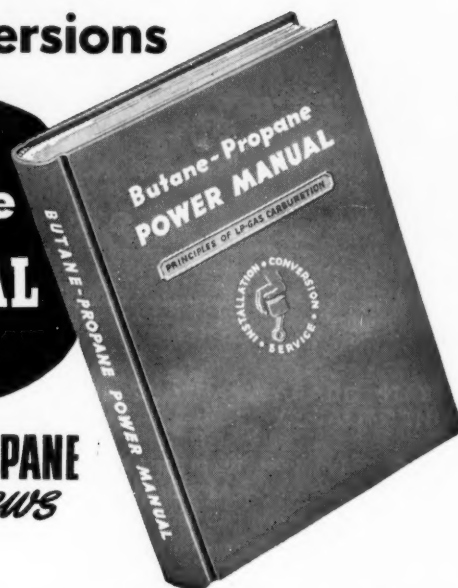
7010 S. Alameda St., P. O. Box 229, Huntington Park, California
Branch Factory: 2330 W. 58th St., Chicago 36, Illinois

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Butane-Propane POWER MANUAL

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News



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 3. Basic Facts of Fuel Combustion in Engines
 4. Factors Affecting Operating Economy and Power
 5. L.P. Gas Carburetion Systems
 6. Regulating Gas Pressure and Temperature
 7. Fuel Supply System, Vehicle Tanks and Equipment
 8. Natural Gas Carburetion
 9. Planning the L.P. Gas Installation
 10. Checking the Engine's Condition
 11. Raising the Compression Ratio
 12. Cooling the Intake Manifold
 13. Ignition Problems
 14. Tractor Conversions
 15. Truck and Bus Conversions
 16. Passenger Car and Taxicab Conversions
 17. Industrial Engine Conversions
 18. Installing and Adjusting L.P. Gas Carburetion Systems
 19. Manufacturers' Instructions for Adjusting L.P. Gas Carburetors
 20. Lubrication of L.P. Gas Engines
 21. Trouble Shooting
 22. Safe Storage and Handling of L.P. Gas
 23. Selling L.P. Gas Carburetion
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Here is the first authoritative guide ever published for the rapidly expanding LPG power market. Basic facts of engines, fuel, and power are given in easy-to-understand language; then careful directions and clear illustrations take you step-by-step through installations, conversions, servicing . . . *everything* needed in a practical working manual for practical men.

What Readers Say

Nearly 10,000 copies of the Butane-Propane POWER MANUAL are now in use. Readers throughout the country have paid tribute to the excellence of the work in statements such as these:

"This book answers a need our industry has had for years."—F.E.S., Bartlesville, Okla.

"It is head and shoulders above most of the normal technical books."—C.V., Cedar Rapids, Iowa.

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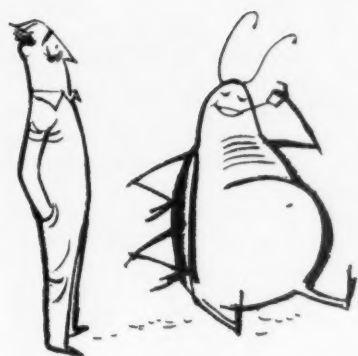
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LOS ANGELES 57, CALIFORNIA**



LPG puts the bee on the bugs

● **Pest control specialists in orchard areas offer opportunities for load-balancing sales—they like the dependability and season-long uninterrupted operation of LPG engines.** ●

Jim Kennedy

TWO valuable accounts have helped to build a substantial volume of LPG business for American Butane Co., the Petrolane affiliate operating in Oxnard, Calif. These firms are in the specialized pest control business and chiefly concerned with citrus growing. One has used propane for eight years and the other has used butane for 15 years.

Ventura Pest Control, Somis, Calif. is owned and managed by Fred Blymeyer. This business is eight years old, but the owner had 15 years previous experience in pest control.

Fifty-four pieces of equipment make up the fleet. Of these, 38 are

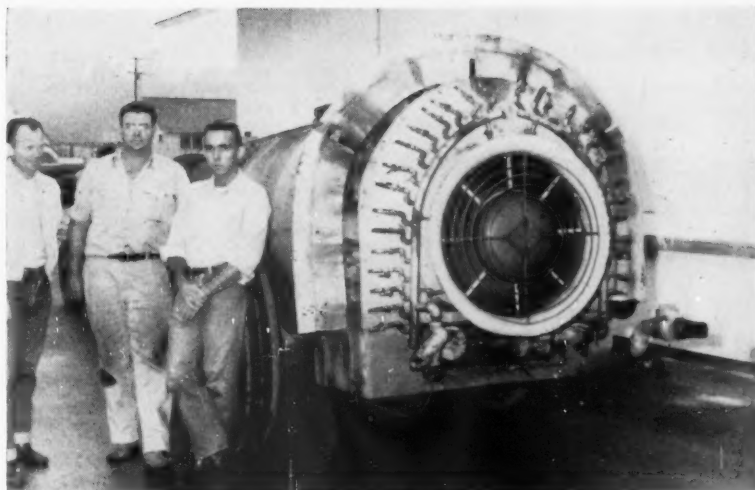


Fig. 1. Rear view of blower-sprayer operated by Ventura Pest Control. Fred Blymeyer, owner and manager, stands between two of his staff. The coupled fins outside the row of nozzles are mechanically oscillated forward and backward to alter direction of the air blow, which picks up insecticide discharged from the nozzles.

equipped with engines. The entire fleet is operated on propane except three pick-up trucks, which have not been converted for various reasons. The fleet includes six sprayers, of which four are hand rigs and two are automatics.

Their tractor-pulled automatic high pressure spray outfits each use about 8 gal. of propane per hour under working conditions. Both tractor engines and the sprayer engines run on the same fuel.

Two 100-lb tanks of propane are mounted on the front of the tractor. The trailer carries one 100-lb tank of propane, also mounted at the front. Each outfit is usually refueled about every six or seven hours of operation.

Approximately 40 to 50 acres of walnuts per day can be sprayed with

each outfit of this type, or 20 acres of lemons per day, or about 10 to 15 acres of oranges per day. All this will vary with what is being sprayed, size of trees, and other factors. Walnuts are usually sprayed at night when the air is calm, so the spray will be concentrated on the trees and not lost by drifting.

The oscillating fins on the rear end of the blower-sprayers (Fig. 1) change direction of the blow to spray the under sides of the leaves as well as the upper sides. The sprayer blast is so powerful its air current can be felt 60 or 70 ft from the source. A propane-operated Lincoln V-8 engine (Fig. 2) runs the blower.

Only three of the propane-operated engines in this fleet are equipped with high compression heads. Cool



Fig. 2. Propane installation on Lincoln V-8 engine on the blower-sprayer owned by Ventura Pest Control.

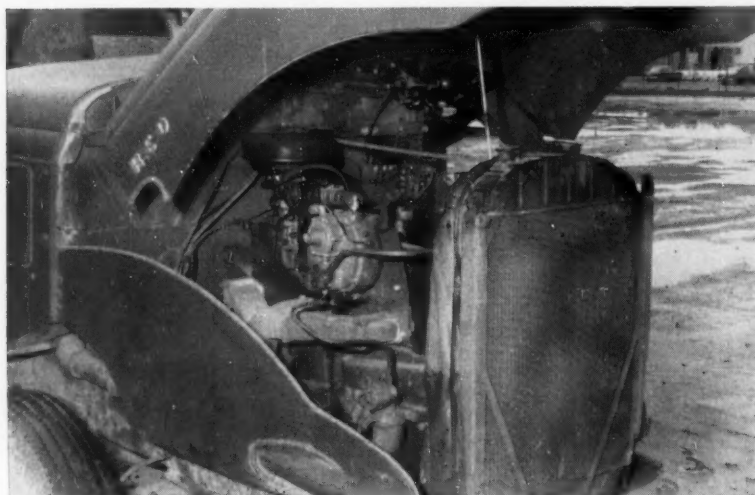


Fig. 3. LPG installation on vehicle engine of Oxnard Pest Control sprayer.

manifolds, hard seats and special valves are not used. The owner feels these changes are not necessary in this type of operation.

Fred Blymeyer long ago decided propane was the best fuel in the world to use in his business. Eight years' experience has only served to prove he was right. There are several reasons why he made this decision.

Fuel loss

Before starting Ventura Pest Control eight years ago, he used gasoline as fuel. A lot of it disappeared. Since switching to propane this is no longer a problem—there is no fuel loss.

When an outfit is refueled with gasoline in the field, a man must hand

pump the fuel from the tank truck to the outfit. In refueling with propane, it is only necessary to connect up the tanks, and the refueling takes care of itself. This releases the man's time to grease the outfit or perform other necessary maintenance work while refueling goes on. This elimination of unproductive time of men and equipment in the field can be an important saving in the course of a year.

Overhauls

The use of propane as fuel means major overhauls of engines are drastically reduced. Some of these engines have run eight years without major mechanical work being neces-

sary, and the owner states he has never seen this equalled with gasoline-operated engines.

Mr. Blymeyer further states his books show a saving of one third in the mechanical maintenance of the fleet while using propane, as compared with gasoline operation. This saving is an important factor in making his business competitive and profitable.

One mechanic can take care of all work necessary to service the fleet. If the fuel used were gasoline, more mechanics would be needed to accomplish the same job. This is another saving.

Oil change

A very important maintenance practice is the daily change of oil in the oil bath air cleaner of every motor. Fred Blymeyer attributes much of the long mechanical life of his engines to this. Spraying is done when the grove is dry. The soil in this locality is made up of very fine silt, which tends to produce a lot of dust when the equipment is in motion. Protection against this is of paramount importance.

Ventura Pest Control has facilities for bulk storage of 2000 gal. of propane. You couldn't sell them any other kind of fuel.

Oxnard Pest Control Association of Oxnard, another good American Butane customer, is a cooperative that services about 800 acres of citrus trees, and works for the owner-members only.

It was organized in 1938 as a gasoline-fueled operation. Butane was tried out in 1940 and they liked it. But this hardly describes their opinion when the wartime rationing of gasoline came into operation. Had they been dependent on that fuel, the whole operation would have had to be drastically curtailed and with far-reaching consequences. Allowing citrus pests to go uncontrolled for three or four years could be disastrous.

Fifteen years' experience with butane has proved so completely satisfactory that every engine except one now runs on this fuel.

The fleet is made up of 22 trucks, 12 of which are sprayers and three of these automatics, seven pick-up trucks and cars, one tractor, and one 300-gal. butane fuel trailer. The butane trailer is used for long trips only.

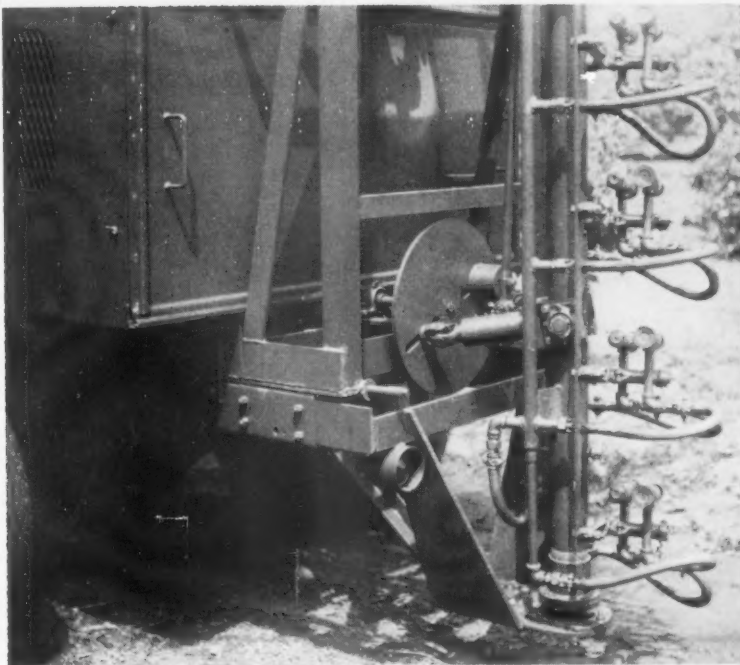
Fig. 4. Les McGinnis, Oxnard Pest Control, stands beside a butane-operated sprayer with mechanically oscillated spray boom folded down for road travel. In orchard operation, the boom swings up vertically.



Photo courtesy California Citrograph.

Oil spray being applied to lemon trees by automatic oscillating tower sprayer.

Photo courtesy California Citrograph.



Mechanism which oscillates the tower of Oxnard Pest Control's automatic sprayer. Positioning of spray nozzles to shoot at angles up and down is also shown.

The general practice is for all equipment to return to the home base once each day for refueling and anything else required.

One of their Hardie sprayers is on a Reo chassis. Both the truck engine and the 317-cu-in. overhead valve Ford V-8 engine, which operates the sprayer, are powered with butane. While in operation, the two engines use about 8 gal. of fuel per hour. Two 40-gal. fuel tanks are carried, one on each side, which is am-

ple to operate an 8-hour shift. Spray coverage in this period is approximately 20 acres of citrus. This will vary with material used and size of trees. According to Les McGinnis, mechanical superintendent of Oxnard Pest Control, one of these large boom rigs operated by three men can do the same amount of work as three hand-operated sprayers requiring 10 to 15 men.

The mechanically operated oscillating spray boom shown in Fig. 4 was

entirely made in the shop by Mr. McGinnis. It was designed to swing a full 180° horizontally, as well as having provision for vertical movement of the spray nozzles. This throws an oval spray pattern to cover all surfaces of the trees and leaves. Two other types of sprayers operated are pictured in Fig. 5. A Reo butane-operated "nursewagon (Fig. 6) carries water and insecticide to the spray equipment.

Mr. McGinnis gives these reasons

Pest control... Using LPG one mechanic can handle all service work in the fleet

why Oxnard Pest Control has used butane as fuel almost exclusively for 15 years.

Mechanical maintenance costs are much lower with butane than with gasoline fuel, because of reduced engine wear.

A 1940 Chevrolet pick-up truck, which was converted to butane in that year, was shown us. In spite of its 295,000 miles of service it is still operating, and has had no major mechanical work except the installation

of three sets of piston rings. Mr. McGinnis expressed the opinion that this truck would have required boring of cylinders, crankshaft grinding and other major work at least once, if it had not always operated on butane.

While these engines operate all year around, an absolute minimum of mechanical work has been required. Speaking in averages, they overhaul engines about every third year rather than every year as is

generally required with gasoline. This cuts cost of operation away down.

Then there is the cost of fuel. One gallon of butane does about the same work as a gallon of gasoline — and costs much less.

Engine-lubricating oil does not have to be changed so frequently because there is no oil dilution, as is usually found with gasoline-operated engines.

One mechanic can handle all service work in this fleet. If it were gasoline operated, two or more would be required.

Less McGinnis states it is their opinion that high compression heads, cool manifolds, hard valve seats, and special valves are not necessary for pest control type of work because load on the engine is not heavy. For highway and other work involving lugging, and where extra power is occasionally needed, he thinks it would be economical to go into these things for greater torque and efficiency.

A 1500-gal. tank of butane provides bulk storage for this fleet. And this is another customer you could not switch away from LPG.

Manager Bob Gale of American Butane points out that these firms have been served for many years by his company. Also that the majority of the load is in warm weather because insects are most active then, and require greater pest control. However, both customers must operate on reduced schedule during the other months of the year as well.

All this adds up to nice business for American Butane during the months when it is most needed to balance the winter load.

In addition to bulk sale of butane-propane, Bob Gale's organization engages in every phase of the LPG market potential in the area. This includes the usual household appliances and other domestic applications, carburetor installations of all kinds, and many other activities.

Ample bulk storage facilities are provided. Propane is stored on the premises in one 30,000-gal. tank. Two additional 500-gal. tanks take care of the butane customers. A fleet of five bulk trucks is maintained for prompt delivery. Most of the total annual load is propane, but a butane truck-run is organized about every third day. ■



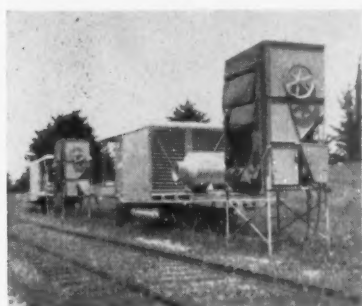
Fig. 5. Other types of sprayers operated by Ventura Pest Control. The unit in foreground is an automatic sprayer for small trees and other low work. At rear is a rig with hand-operated sprayers. Two men work on the ground and one or two, as needed, on the platform.



Fig. 6. One of Oxnard Pest Control's butane-powered water wagons. A PTO-operated pump quickly transfers water to sprayer tank.

Propane protects your breakfast strawberries

THOSE luscious strawberries from Santa Maria, Calif., that show up in the Eastern markets each spring arrive in good condition because they are thoroughly chilled by propane-driven precooling units before being closed in the cars. That little extra precaution—getting the temperature down quickly instead of waiting for them to cool slowly from the ice in the bunkers of the car—makes the difference between arrival in perfect condition and a high percentage of spoilage.



Two of the seven big propane engine-operated precooling units that serve the strawberry shippers of Santa Maria, Calif.

Seven of these big pre-cooling units sit beside the loading tracks in the Santa Maria freight yards. Last season they cooled the cargoes of 211 refrigerator cars during the three-month shipping period—late April, May, June and early July. Their operation required 1066 gal. of propane, a nice addition to the summer gallonage of Garden City Butane Service (Petrolane affiliate).

The strawberries are picked in the morning, while they are still under the influence of the cool nights induced by the Pacific breezes. They are packed in the fields, and rushed to the loading tracks, where they are placed aboard "reefers" that are already iced and standing at 45° temperature. The cars are then moved to the precoolers, where refrigerated air is blown through the cargo, quickly bringing the temperature of the

Continued on page 134

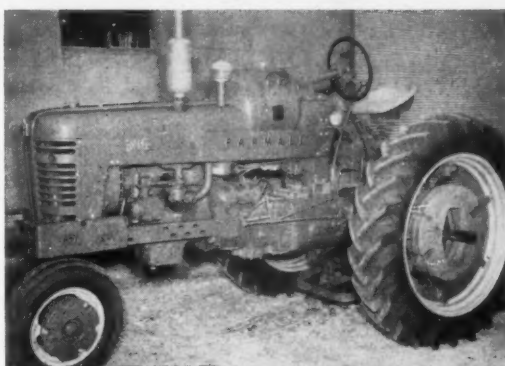
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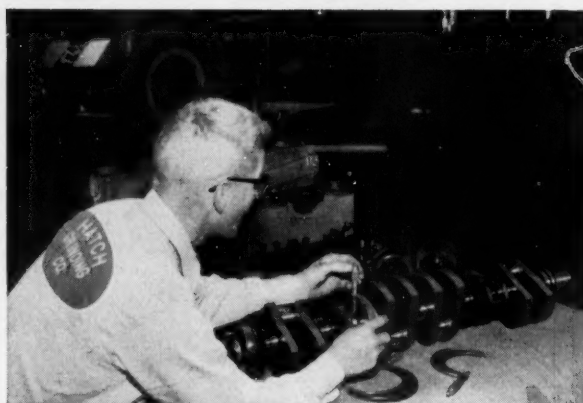
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ENGINE FROM UNIT NO. 24 was torn down at 148,000 miles for a "look-see"—first time pan was ever removed. Examination by Hatch Grinding Service, independent machinists and motor rebuilders, shows pistons, sleeves and crankshaft are all within original factory tolerances.



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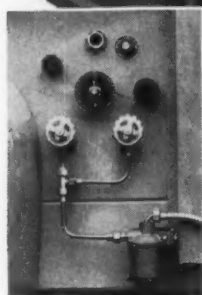
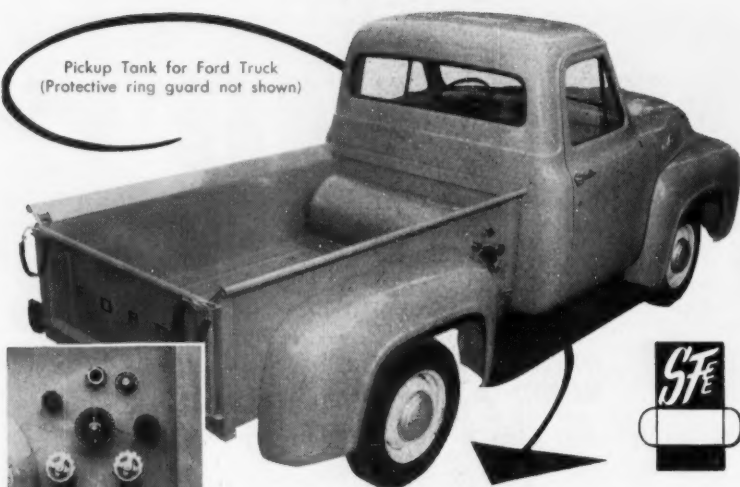
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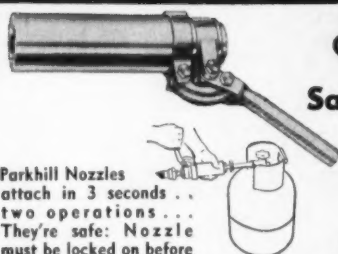
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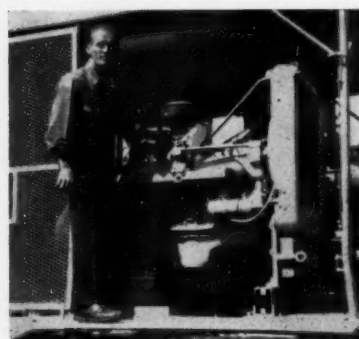
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berries down to below 38°. They are then ready to travel.

During the journey the low temperature is maintained by blowing air over the ice in the bunkers, from which it is distributed beneath the load, finding its way up through the berries and back to the ice bunkers for recooling. The fan is driven from the axle of the car as it rolls across the continent. These refrigerated loads are carried in high speed trains that make schedules almost equalling passenger train speed. But even then such perishable products could not arrive in such good condition without the extra "boost" in refrigeration provided by the propane engine-driven precooling machines. ■

In Florida, "Pounds" means "L. P. gas"

J. Arthur Thompson

DOWN in the citrus belt of Florida, the name "Pounds" has meant Case Farm Machinery for many years and during the last four or five, it has also meant L. P. gas for the agricultural user.

You will find the Pounds Motor Co. at Winter Garden, the Pounds Tractor Co. at Winter Haven, and the Pounds-Zeiss Motor Co. at Sebring, Fla. All three of them handle Case tractors and other farm equipment and all of them handle L. P. gas for their agricultural and industrial customers.



Hoyle Pounds, whose interests are L. P. gas, Case tractors, and motor boats.

The chief of the Pounds tribe is Hoyle Pounds, a weather-beaten, stocky boating enthusiast, whose eyes snap and twinkle as he discusses his three favorite subjects: motor boating, Case tractors, and L. P. gas. And he knows all three subjects thoroughly.

In 1954, Hoyle Pounds was the leading Case dealer in the United States and Canada. For many years he has been very close to the top. During the last year and a half he has sold approximately 150 tractors, of which about 140 were fitted for L. P. gas. In addition to his sales of new tractors, he has made about as many conversions to L. P. gas of other tractors, trucks, irrigation motors, sprayers and miscellaneous equipment.

His large building at Winter Garden is crowded with equipment undergoing conversion. At the moment he is expanding his facilities by building another 80- by 110-ft shop and storage building.

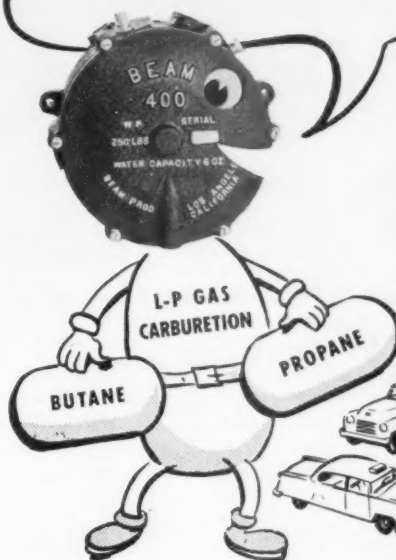
L. P. gas sales are handled by Pounds Industrial Gas, which has storage facilities of 50,000 gal. Approximately 1.25 million gal. of mix (70% butane and 30% propane) are handled in a year's time.

Two 1750-gal. truck tanks and one 2200-gal. truck tank make the deliveries to the agricultural, domestic and industrial customers.

Plans are being made to install mobile telephones in all trucks to facilitate the service.

Two sons, Herbert and Russel Pounds, are associated with their fa-

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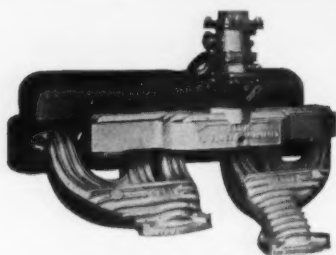
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This orchard sprayer is among various pieces of equipment converted to L. P. gas operation at the Pounds Tractor Co. in Winter Haven, Fla.

ther in the Winter Garden business.

A bit farther south at Winter Haven, another son, Donald E. Pounds, owns and operates the Pounds Tractor Co. While sale of Case tractors is the big end of the business, a very large shop is kept busy in service work and in converting trucks, tractors and all kinds of farm equipment over to L. P. gas operation.

In three months of 1955, Pounds Tractor delivered 36 tractors (25 to one customer) and of the 36 ma-

chines, 33 of them were for L. P. gas.

Storage or field delivery tanks are sold or leased to their customers to handle the gas on the farms or in the orchards.

Two trucks, one of 1100-gal. and one of 2200-gal. capacity, deliver to customers from the Pounds bulk plant, which has a capacity of around 30,000 gal.

Jack Zeiss, son-in-law of Hoyle Pounds, runs the Pounds-Zeiss Motor Co. at Sebring.

POWER NEWS

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Individual listings contain detailed information on each station covering hours of operation, type of operation, product available, phone, pumping facilities, additional automotive services, as well as names and addresses. The directory was compiled for use by owners of the increasing number of trucks, buses, taxis and private cars throughout the country who now use L. P. gas and enjoy its trouble-free and economical features.

This handy guide will make transportation men aware of the presence of the "Third Pump" appearing in more and more of the nation's filling stations, supplementing the usual gasoline and diesel outlets. The directory is priced at \$1.25 per copy and may be obtained by writing LPGA, 11 S. La Salle St., Chicago.

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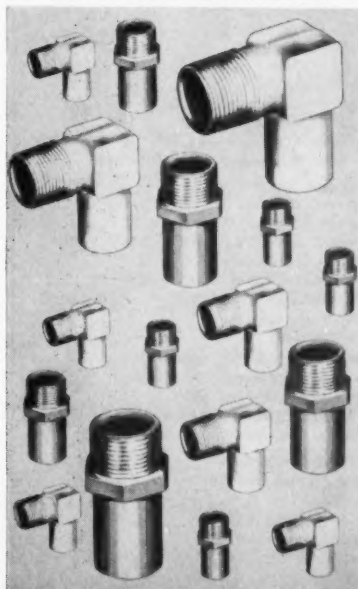
Century Carburetor's new manufacturing plant in Paramount, Calif., an industrial center of Los Angeles county.

Century moves into new Paramount, Calif., plant

Century carburetors get a big new manufacturing plant is the announcement of Century Gas Equipment Co. from its new address at 6855 E. Rosecrans Blvd., Paramount, Calif.

This new building, located in the industrial center of Los Angeles county, is complete with offices and

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plant. It boasts a new testing and experimental laboratory as well as a machine shop and modern production line system.

The move to larger quarters became a necessity, according to Frank E. Pilling Jr., president, to keep pace with the rapid sales expansion of the past two years. In recent months three prominent truck manufacturers have designated Century carburetion as standard factory equipment for all their L. P. gas models. Plans for several new product additions to the Century line promise an excellent future.

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Get the facts, write for Bulletin No. G-75

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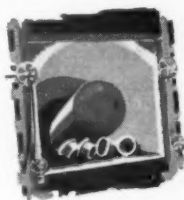
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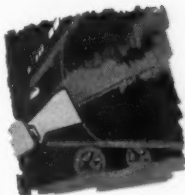
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*American Metal Products Co., Inc.	—	General Controls Co.	—	*Quaker Mfg. Co.,	
*American Meter Co., Inc.	18	General Electric Co.,	—	Div. of Florence Stove Co.	12, 13
Reliance Regulator Div.	—	Electronics Div.	—	Radio Corp. of America	—
*American Pipe & Steel Corp.	—	*General Gas Light Co.	—	*Ransome Corp of America	—
*American Radiator & Standard	—	General Motors Co.,	—	Rector Well Equipment Co.	120
Sanitary Corp.	—	Chevrolet Motor Div.	—	Remington Rand, Inc.	—
*Sunbeam Air Conditioner Div.	—	Griffiths, E. F. Co., The	—	Reo Motors, Inc.	132, 133
*American Tank & Mfg. Co.	22	Grinnell Co., Inc.	—	Republic Heater Corp.	—
Anchor Coupling Co.	82	Gulf Oil Corp.	95	Reznor Mfg. Co.	—
*Anchor Petroleum Co.	Fourth Cover			Rheem Mfg. Co.	121
*Anco Mfg. & Supply Co.	3	Hannay & Son, Inc., Clifford B.	—	Richardson Gasoline Co., Sid	47
Anderson & Forrester	—	Hardwick Stove Co.	—	Ridge Tool Co., The	93
Anthony Co.	—	Harper-Wyman Co.	—	Robertshaw-Fulton Controls Co.,	—
*A-P Controls Corp.	—	Herbster Furnace Co.	97	Grayson Controls Div.	—
Armco Drainage & Metal	—	Hewitt-Robins, Inc.	—	Robertshaw Thermostat Div.	—
Prod., Inc., Div. of Armco	—	Holly Mfg. Co.	—	*Rockwell Mfg. Co.,	
International Corp.	—	Holsclaw Bros., Inc.	112	Pittsburgh Equitable Meter Div.	1
		Imperial Brass Mfg. Co.	—	Rockwood Sprinkler Co.,	
*Bagwell-General Steel Co.	—	Industrial Mfg. Co. of Texas, Inc.	84	Ball Valve Div.	79
*Bastian-Blessing Co., The	44, 45, 135	International Harvester Co.	—	Roney, Inc.	112
Beacon Petroleum Co.	—			*Roper Corp., George D.	
*Beard Co., Inc., The J. B.	65, 66	*J & S Carburetor Co.	—	Pump Division	94
Beam Products Mfg. Co.	135	Janitrol Heating & Air Cond. Div.,	—	Range Division	104
*Bendix Aviation Corp.,	—	Surface Combustion Corp.	—	Ruud Manufacturing Co.	—
Zenith Carburetor Div.	—	*Johnson Gas Appliance Co.	118	Sante Fe Engineering &	
*Birmingham Stove & Range Co.	—	Johnson Machine Shop	—	Equipment Co.	134
*Black, Sivalis & Bryson, Inc.	77	Krug, D. H., Co.	—	*Scaife Co.	—
Blue Co., John	—			*Selwyn-Pacific Co.	96, 97
*Bowser, Inc.	—	*Linde Air Products, Div. of	—	Sheffield Bronze Paint Corp.	—
Brown Stove Works	80	Union Carbide & Carbon Corp.	55	Shell Oil Company	—
Broyhill Mfg. Co.	—	Locke Stove Co.	—	*Sinclair Oil & Gas Co.	119
*Brunner Mfg. Co.	108	*LPG Credit Corporation	75	Skelly Oil Co.	—
Bryant Division, Carrier Corp.	—	LPG Leasing Corp.	—	Smith Corp., A. O. Permaglas Div.	69
Buckeye Incubator Co.	—	Lubbock Machine & Supply Co.	101	*Smith Precision Products Co.	24
Butler Mfg. Co.	—	Magic Chef, Inc.	—	*Sprague Meter Co.	—
Calor Gas Company	—	Manchester Welding &	—	Squibb-Taylor, Inc.	—
Caloric Appliance Corp.	98	Fabricating Co.	—	Star Manufacturing Co.	117
Carter Oil Co., The	106	Martin Stamping & Stove Co.	120	Standard Meter Repair Co.	108
*Century Gas Equipment Co.	137	Martin Tube Benders, W. H.	—	Steel Cooperage Div., -	—
*Charlotte Tank Corp.	—	*Master Tank & Welding Co.	61, 102	Serrick Corp.	—
Chevrolet Motor Div.,	—	McCabe-Powers Auto Body Co.	—	Stewart-Warner Corp.	86
Gen. Motor Co.	—	McNamar Boiler & Tank Co.	115	Stratoflex, Inc.	—
Chiksan Company	—	Mettler Mfg. Div.,	—	Superior Industries, Inc.	110
Cities Service Oil Co.	59	Eclipse Fuel & Engineering Co.	—	Superior Tank Corp.	—
Coleman Co., Inc.	—	Milwaukee Gas Specialty Co.	107	Surface Combustion Corp.,	—
*Columbian Steel Tank Co.	—	Mine Safety Appliance, Inc.	—	Janitrol Heating-Air Cond. Div.	—
*Corken's, Inc.	—	Minneapolis-Honeywell	—		
Crane Co., The	81	Regulator Co.	—	*Tappan Stove Co., The	99
Crane Packing Co.	—	Mission Appliance Corp.	—	*Temco, Inc.	14, 15
Cribben & Sexton Co.	10, 11	Mississippi Tank Co.	—	Texas Boiler & Machy. Co.	—
Crouse-Hinds Co.	74	*Mitchell Co., John E.	—	*Texas Natural Gasoline Corp.	111
Dallas Tank Co., Inc.	113	Modine Mfg. Co.	—	Texoil Equipment, Inc.	—
Dal-Worth Tank Co.	83	Moellenbrock & Wilke	—	*Trageser Copper Works, Inc.	—
Davis Engineering Corp.	—	Motorola, Inc.	51	*Trinity Steel Co., Inc.	4, 5
Day & Night Div., Carrier Corp.	85	*Mutual Liquid Gas	—	True Blue Oil Co.	—
Dearborn Stove Co.	—	Equipment Co., Inc.	116	*Tuloma Gas Products Co.	Front Cover
Deere, John	—			*Union Carbide & Carbon Corp.,	
*Delta Tank Mfg. Co.	—	Nelson, Edward S., Ltd.	—	Linde Air Products Co., Div.	55
Dix Carburetor Co.	136	*Neptune Meter Co.	—	*United Petroleum Gas Co.	53
*Dixie Products, Inc.	—	Nicson Engineering Co.	—	*United States Rubber Co.	—
Dixon Valve & Coupling Co.	—	Norman Products Co.	—	Utility Appliance Corp.	49
*Downingtown Iron Works, Inc.,	—	*North Texas Tank Co.	6, 7	*Viking Pump Co.	114
Div. of Pressed Steel Tank Co.	—	Northwest Fabricators	—	Waldorf Heater Co.	—
Drake & Townsend, Inc.	—	Ohio Brass Co.	103	*Wallace, William Co.,	—
		Ohio Foundry & Mfg. Co.	73	Metalbestos Div.	—
Eisele & King, Libaire,	—	Ohio Injector Co., The	73	*Warren Petroleum Corp.	16
Stout & Co.	100	Parkhill Co.	134	*Weatherhead Co., The	20
Ellis Manifold Co.	136	*Pasley Mfg. & Dist. Co., The	78	*Welbilt Stove Co.	—
Empire Oil & Refinery Co.	—	Peerless Mfg. Corp.	—	Western Tank & Steel Corp.	131
Empire Stove Co.	—	Phillips & Buttorff Mfg. Co.	105	Whitehead Mfg. Corp., D. W. ;	57
*Ensign Carburetor Co.	125	*Phillips Petroleum Co.	109	White Products Corp.	86
		*Pittsburgh Equitable Meter Div.,	—	White River Distributors, Inc.	120
Fairbanks, Morse & Co.	71	Rockwell Mfg. Co.	1	*Wood, A. R. Mfg. Co.	118
First Acceptance Corp.	—	Powell Co., The William	63	Wood Co., John	—
*Fisher Governor Co.	8, 9	Power Manifold Co.	137	Heater & Tank Div.	—
*Flint Steel Corp.	—	Power Manual	126	Woodside Industries	—
Ford Motor Co.	—				

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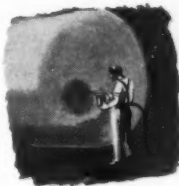
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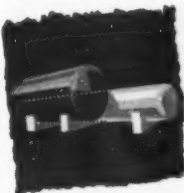
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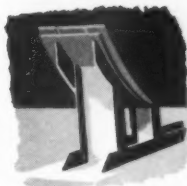
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